

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: June 27, 2003, 18:15:06 ; Search time 22 Seconds
(without alignments)
2491.587 Million cell updates/sec

Title: US-09-734-672-4

Perfect score: 9649
Sequence: 1 MDLSALRVEEVGNVINAMQK.....LYCCQELDFYLIPIQIHSY 1863

Scoring table: BLOSUM62
Gapop 10.0 , Gapect 0.5

Searched: 262574 seqs, 29422922 residues

Total number of hits satisfying chosen parameters: 262574

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%

Listing first 45 summaries

Database :

Issued_Patents_AA:*
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Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	9649	100.0	1863	1 US-08-798-691-4	Sequence 4, Appl
2	9649	100.0	1863	3 US-08-825-487A-4	Sequence 4, Appl
3	9649	100.0	1863	4 US-09-074-476-6	Sequence 6, Appl
4	9642	99.9	1863	1 US-08-480-784-2	Sequence 2, Appl
5	9642	99.9	1863	1 US-08-483-553-2	Sequence 2, Appl
6	9642	99.9	1863	1 US-08-487-002-2	Sequence 2, Appl
7	9642	99.9	1863	1 US-08-483-554B-2	Sequence 2, Appl
8	9642	99.9	1863	1 US-08-488-011B-2	Sequence 2, Appl
9	9642	99.9	1863	4 US-08-850-727-2	Sequence 2, Appl
10	9642	99.9	1863	5 PCT-US95-10202-2	Sequence 2, Appl
11	9642	99.9	1863	5 PCT-US95-10203-2	Sequence 2, Appl
12	9642	99.9	1863	5 PCT-US95-10220-2	Sequence 2, Appl
13	9635	99.9	1863	1 US-08-558-591-2	Sequence 2, Appl
14	9635	99.9	1863	1 US-08-798-691-2	Sequence 2, Appl
15	9635	99.9	1863	1 US-08-798-691-6	Sequence 6, Appl
16	9635	99.9	1863	3 US-08-825-487A-2	Sequence 6, Appl
17	9635	99.9	1863	3 US-08-825-487A-6	Sequence 6, Appl
18	9635	99.9	1863	4 US-09-074-476-2	Sequence 2, Appl
19	9635	99.9	1863	4 US-09-074-476-4	Sequence 4, Appl
20	9630	99.8	1863	4 US-08-425-061-16	Sequence 16, Appl
21	9630	99.8	1863	2 US-08-825-886-16	Sequence 16, Appl
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23	9581	99.3	1863	4 US-08-986-106-2	Sequence 2, Appl
24	9581	99.3	1863	4 US-09-007-678B-49	Sequence 4, Appl
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41	1552	16.1	301	2 US-08-785-464-1	Sequence 1, Appl
42	1020	10.6	196	2 US-08-785-464-3	Sequence 3, Appl
43	558	5.8	106	2 US-08-785-464-2	Sequence 2, Appl
44	520	5.4	100	4 US-09-230-196-3	Sequence 3, Appl
45	492	5.1	92	2 US-08-785-464-4	Sequence 4, Appl

ALIGNMENTS

RESULT 1
US-08-798-691-4
Sequence 4, Application US/08798691
Patent No. 5750400
GENERAL INFORMATION:
APPLICANT: Murphy, Patricia D.
APPLICANT: Allen, Antonette C.
APPLICANT: Alvarez, Christopher P.
APPLICANT: Critz, Brenda S.
APPLICANT: Olson, Sheri J.
APPLICANT: Schelter, Denise B.
APPLICANT: Zeng, Bin
TITLE OF INVENTION: Coding Sequences of the Human
NUMBER OF SEQUENCES: 72
CORRESPONDENCE ADDRESS:
ADDRESSEE: ONCORMED
STREET: 200 Perry Parkway
CITY: Gaithersburg
STATE: MD
COUNTRY: USA
ZIP: 20877
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/798,691
FILING DATE: 12-Feb-97
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Thomas Gallegos
REGISTRATION NUMBER: 32,692
REFERENCE/DOCKET NUMBER: PA-0054CIP
TELECOMMUNICATION INFORMATION:
TELEPHONE: 301-527-2051
TELEFAX: 301-208-6997
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 1863 amino acids
TYPE: amino acid
STRANDEDNESS: not relevant
TOPOLOGY: not relevant
MOLECULE TYPE: protein
ORIGINAL SOURCE:
ORGANISM: Homo sapiens
STRAIN: BRCA1
POSITION IN GENOME:
CHROMOSOME/SEGMENT: 17

MAP POSITION: 17q21
US-08-798-691-4

Query Match 100.0%; Score 9649; DB 1; Length 1863;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 1863; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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DB 181 ELGSDSEDIYNAKTYCSVGOELQITPQGTREIISLDSAKKAACEFSETDVTNTEHHQ 240
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DB 361 SENRDTEDYPMITLNSISOKVNMWFSRSDLSDDSHDESESNAAVADVLNVD 420
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DB 421 EYSSSEKIDILASDPHEALICKSEYRSHKSVESNIEDKIFGKYTRKASLPNLSHYTEN 480
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QY 1861 SHY 1863
DB 1861 SHY 1863

RESULT 2
US-08-825-4874-4
Sequence 4, Application US/088254874
Patent No. 604689
GENERAL INFORMATION:
APPLICANT: Murphy, Patricia D.
TITLE OF INVENTION: METHODS FOR IDENTIFYING VARIATIONS IN POLYNUCLEOTIDE SEQUE
NUMBER OF SEQUENCES: 110
CORRESPONDENCE ADDRESS:

```

ADDRESSER: Howrey & Simon
STREET: 1299 Pennsylvania Avenue., N.W.
CITY: Washington,
STATE: DC
COUNTRY: USA
ZIP: 20004
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
OPERATING SYSTEM: IBM PC compatible
SOFTWARE: Patent Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/825,487A
FILING DATE: 28-MAR-1997
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/US98/060002
FILING DATE: 26-Mar-1998
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Albert P. Halluin
REGISTRATION NUMBER: 25,227
REFERENCE/DOCKET NUMBER: 03371, 0012,999
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-463-8100
TELEFAX: 650-463-8400
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 1863 amino acids
TYPE: amino acid
STRANDEDNESS: not relevant
TOPOLOGY: not relevant
MOLECULE TYPE: protein
ORGANISM: Homo sapiens
STRAIN: BRCA1
POSITION IN GENOME:
CHROMOSOME/SEGMENT: 17
MAP POSITION: 17q21
US-08-825-487A-4

Query Match      100.0%; Score 9649; DB 3; Length 1863;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 1863; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db      1561 TPYLESGISLSDDESPDESDRAESARVGNIPSTSLAKYPOLKVAESASPAAHTT 1620
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Db      1621 DTAGYNAMEESVSRKPELTASTERYNKRMSVSGLPPEEMLYKFAKHHITLTNLI 1680
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Db      1681 TEETHYVYMKTDAAEVCEKTLKFLGIGAGKVVSYFWTQSIKERKMLNEDFEYRGVY 1740
Qy      1741 VNGRNHQPKRARESDQRIKFRGLEICCYGPTNPTDQLEMMVQLCASVYKELSSFTL 1800
Db      1741 VNGRNHQPKRARESDQRIKFRGLEICCYGPTNPTDQLEMMVQLCASVYKELSSFTL 1800
Qy      1801 GTGVHPYVYVOPDANTEEDNGFHAIGQKCEAPVYTRRWLDVVALYQCELDYTLIPQIPH 1860
Db      1801 GTGVHPYVYVOPDANTEEDNGFHAIGQKCEAPVYTRRWLDVVALYQCELDYTLIPQIPH 1860
Qy      1861 SHY 1863
Db      1861 SHY 1863

RESULT 3
US-09-074-476-6
; Sequence 6, Application US/09074476
; Patent No. 6130322
; GENERAL INFORMATION:
; APPLICANT: Murphy, Patricia D.
; APPLICANT: Allen, Antonette C.
; APPLICANT: Alvarez, Christopher P.
; APPLICANT: Citez, Brenda S.
; APPLICANT: Olson, Sheri J.
; APPLICANT: Thurber, Denise
; APPLICANT: Zeng, Bin
; TITLE OF INVENTION: Coding Sequences of the Human
; TITLE OF INVENTION: BRCA1 Gene
; NUMBER OF SEQUENCES: 72
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Howrey & Simon
; STREET: 1299 Pennsylvania Avenue N. W.
; CITY: Washington
; STATE: DC
; COUNTRY: USA
; ZIP: 20004
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/074,476
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 09/074,453
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Albert P. Halluin
; REGISTRATION NUMBER: 25,227
; REFERENCE/DOCKET NUMBER: 5371.34.US01
; TELEPHONE: 650-463-8109
; TELEFAX: 650-463-8400
; INFORMATION FOR SEQ ID NO: 6:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1863 amino acids
; TYPE: amino acid

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; STRANDEDNESS: not relevant
; TOPOLOGY: not relevant
; MOLECULE TYPE: Protein
; ORIGINAL SOURCE:
; ORGANISM: Homo sapiens
; STRAIN: BRCA1 (om13)
; POSITION IN GENOME:
; CHROMOSOME/SEGMENT: 17
; MAP POSITION: 17q21
; US-09-074-476-6

Query Match      100.0%; Score 9649; DB 4; Length 1863;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 1863; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 MDLSARVEEYONVYNNAMOKTLEPCICELKEVYSRKCDHIFCKFQMLKLNOKKPSQ 60
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Db      661 RHSRNLQMEKKEPATGAKKSNKPNBOTSKRHSDTFPELKLINAGSFTKCSNSELKE 720
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Db      721 FVNPSPREKEKELETVKYSNNADEKDKMLSGERYLOTRESESSSISLVPGTGYGQ 780
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Db      781 ESISLEVSTLGAKTEPNKCVSQCAFENPKGLIHGCSKDNNDTEGGRYPLGHEVNS 840
Qy      841 RETISEBESLDAQIYQNTFKVYSKOSFALFNPNGNAEBEACTFSAHSGSLAKKOSPKYT 900
Db      841 RETISEBESLDAQIYQNTFKVYSKOSFALFNPNGNAEBEACTFSAHSGSLAKKOSPKYT 900

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Db 961 NETGLTPNKHGLONPRIPRIPRIPKSVFVTKCKKNLEENFEHSHSPREMGNEIP 1020
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Qy 1861 SHY 1863
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; Sequence 2, Application US/08480784
; Patent No. 5693473
; GENERAL INFORMATION:
; APPLICANT: Skolnick, Mark H.
; APPLICANT: Goldgar, David E.
; APPLICANT: Mikl, Yoshio
; APPLICANT: Swenson, Jeff
; APPLICANT: Kamb, Alexander
; APPLICANT: Harshman, Keith D.
; APPLICANT: Shattuck-Eidens, Donna M.
; APPLICANT: Tavligian, Sean V.
; APPLICANT: Wiseman, Roger W.
; APPLICANT: Futreal, P. Andrew
; TITLE OF INVENTION: 17q-linked Breast and Ovarian Cancer
; TITLE OF INVENTION: Susceptibility Gene
; NUMBER OF SEQUENCES: 85
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Venable, Baetjer, Howard & Civiletti, LLP
; STREET: 1201 New York Avenue, N.W., Suite 1000
; CITY: Washington
; STATE: DC
; COUNTRY: USA
; ZIP: 20005
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/480,784
; FILING DATE:
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/409,305
; FILING DATE: 24-MAR-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/348,824
; FILING DATE: 29-NOV-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/308,104
; FILING DATE: 16-SEP-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/300,266
; FILING DATE: 02-SEP-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/289,221
; FILING DATE: 12-AUG-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Ihnen, Jeffrey L.
; REGISTRATION NUMBER: 28,957
; REFERENCE/DOCKET NUMBER: 24884-109347
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 202-962-8410
; TELEFAX: 202-962-8300
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1863 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-480-784-2

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Query Match 99.9% Score 9642; DB 1; Length 1863;
Best Local Similarity 99.9%; Pred. No. 0;
Matches 1862; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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 QY 1861 SHY 1863
 DB 1861 SHY 1863

RESULT 5
 US-08-483-553-2
 ; Sequence 2, Application US/08483553
 ; Patent No. 5709999
 ; GENERAL INFORMATION:
 ; APPLICANT: Skolnick, Mark H.
 ; APPLICANT: Goldgar, David E.
 ; APPLICANT: Mikki, Yoshio
 ; APPLICANT: Swenson, Jeff
 ; APPLICANT: Ramb, Alexander
 ; APPLICANT: Harshman, Keith D.
 ; APPLICANT: Shattuck-Eidens, Donna M.
 ; APPLICANT: Tavligian, Sean V.
 ; APPLICANT: Wiseman, Roger W.
 ; APPLICANT: Futreal, P. Andrew
 ; TITLE OF INVENTION: 17q-Linked Breast and Ovarian Cancer
 ; TITLE OF INVENTION: Susceptibility Gene
 ; NUMBER OF SEQUENCES: 85
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Venable, Baetjer, Howard & Civiletti, LLP
 ; STREET: 1201 New York Avenue, N.W., Suite 1000
 ; CITY: Washington
 ; STATE: DC
 ; COUNTRY: USA

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: ZIP: 20005
: COMPUTER READABLE FORM:
: MEDIUM TYPE: Floppy disk
: COMPUTER: IBM PC compatible
: OPERATING SYSTEM: PC-DOS/MS-DOS
: SOFTWARE: Patentin Release #1.0, Version #1.30
: CURRENT APPLICATION DATA:
: APPLICATION NUMBER: US/08/483,553
: FILING DATE:
: CLASSIFICATION: 435
: PRIORITY APPLICATION DATA:
: APPLICATION NUMBER: US 08/409,305
: FILING DATE: 24-MAR-1995
: PRIORITY APPLICATION DATA:
: APPLICATION NUMBER: US 08/348,824
: FILING DATE: 29-NOV-1994
: PRIORITY APPLICATION DATA:
: APPLICATION NUMBER: US 08/308,104
: FILING DATE: 16-SEP-1994
: PRIORITY APPLICATION DATA:
: APPLICATION NUMBER: US 08/300,266
: FILING DATE: 02-SEP-1994
: PRIORITY APPLICATION DATA:
: APPLICATION NUMBER: US 08/289,221
: FILING DATE: 12-AUG-1994
: ATTORNEY/AGENT INFORMATION:
: NAME: Ihnen, Jeffrey L.
: REGISTRATION NUMBER: 28,957
: REFERENCE/DOCKET NUMBER: 24884-109347
: TELECOMMUNICATION INFORMATION:
: TELEPHONE: 202-962-8300
: TELEFAX: 202-962-8310
: INFORMATION FOR SEQ ID NO: 2:
: SEQUENCE CHARACTERISTICS:
: LENGTH: 1863 amino acids
: TYPE: amino acid
: TOPOLOGY: linear
: MOLECULE TYPE: protein
: US-08-483-553-2

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Query Match          99.9%; Score 9642; DB 1; Length 1863;
Best Local Similarity 99.9%; Pred. No. 0;
Matches 1862; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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DB 421 EYSGSSEKIDLLASDPHEALICKSERVHASKVESNIEDKIFGKTYRKKAASLPNLSHTEN 480
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QY 841 RETSIEMESELDAQYLONTFKVSKROSFALFNSPNGNAEEBCATFSAHSGSLKKOSPKYT 900
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DB 1141 HASQVCEPDDLLDGEIKEDTSEFANDIKESSAVFSKYQKGLSRSPSFTHTLQAQ 1200
QY 1201 GYRRGAKKLESSEENLSEDEDELPCFOHLGLGVANNIPQSTSRHSTVATELSKTEENL 1260
DB 1201 GYRRGAKKLESSEENLSEDEDELPCFOHLGLGVANNIPQSTSRHSTVATELSKTEENL 1260
QY 1261 LSLKNSLNDCSNOYIILAKASQEHLSSETKCSASLFSQSCSELEDTANTNTQDPFLIGS 1320
DB 1261 LSLKNSLNDCSNOYIILAKASQEHLSSETKCSASLFSQSCSELEDTANTNTQDPFLIGS 1320
QY 1321 SKQMRHOSQGVGLSDKEIYSDDEERGDTGLEENNQEQSMDSNLGEAASCESETVSYE 1380
DB 1321 SKQMRHOSQGVGLSDKEIYSDDEERGDTGLEENNQEQSMDSNLGEAASCESETVSYE 1380
QY 1381 DCSGLSSQSDILITQQOQRTQMHNLITKLOQEAELAVLEQHSQPSNSYPIIISDSALE 1440
DB 1381 DCSGLSSQSDILITQQOQRTQMHNLITKLOQEAELAVLEQHSQPSNSYPIIISDSALE 1440
QY 1441 DLRNPEOSTSEKAVILTSQSSSEYPISONPEGLISADKEFVSADSSSTKKEGVERSSPSK 1500
DB 1441 DLRNPEOSTSEKAVILTSQSSSEYPISONPEGLISADKEFVSADSSSTKKEGVERSSPSK 1500
QY 1501 CPSLDDRWYHSGSGSLQNNRNPQOELIKVYVDEEQGLEESGPHDLTETSYLPRQDLEG 1560

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Qy 1561 TPYLESGISLFDDESDPESDRAPEASAVGNIPSTSLAKYPOLKVAESAOSPAAHHT 1620
Db 1561 TPYLESGISLFDDESDPESDRAPEASAVGNIPSTSLAKYPOLKVAESAOSPAAHHT 1620
Qy 1621 DTAGNAMEESVSRKPELTASTERVNKRMSVSGLPEEFMLVYKFAKHHTLTJNL 1680
Db 1621 DTAGNAMEESVSRKPELTASTERVNKRMSVSGLPEEFMLVYKFAKHHTLTJNL 1680
Qy 1681 TEETHVVMKTDAAEVCERTLKYFLGJGCKWVSVFWTOSTIKERKMLNEDFEVRGV 1740
Db 1681 TEETHVVMKTDAAEVCERTLKYFLGJGCKWVSVFWTOSTIKERKMLNEDFEVRGV 1740
Qy 1741 VGNRHGQPKRARESODRKIFRGLICCYGPTNNPTDQLEMMVOLCGASVYKELSSFTL 1800
Db 1741 VGNRHGQPKRARESODRKIFRGLICCYGPTNNPTDQLEMMVOLCGASVYKELSSFTL 1800
Qy 1801 GTGVHPVIVVOPDANTEGDFHAIQOMCEAPVYTRBWLDSVALYQOQELDTYVLIJPIPH 1860
Db 1801 GTGVHPVIVVOPDANTEGDFHAIQOMCEAPVYTRBWLDSVALYQOQELDTYVLIJPIPH 1860
Qy 1861 SHY 1863
Db 1861 SHY 1863

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RESULT 6

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US-08-487-002-2
Sequence 2, Application US/08487002
Patent No. 5710001
GENERAL INFORMATION:
APPLICANT: Shattuck-Eldens, Donna M.
APPLICANT: Sismard, Jacques
APPLICANT: Emi, Mitsuru
APPLICANT: Nakamura, Yunsuke
APPLICANT: Dutocher, Francine
TITLE OF INVENTION: 17q-Linked Breast and Ovarian Cancer
NUMBER OF SEQUENCES: 85
CORRESPONDENCE ADDRESS:
ADDRESSEE: Venable, Baetjer, Howard & Civiletti, LLP
STREET: 1201 New York Avenue, N.W., Suite 1000
CITY: Washington
STATE: DC
COUNTRY: USA
ZIP: 20005
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/487,002
FILING DATE:
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/409,305
FILING DATE: 24-MAR-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/348,824
FILING DATE: 29-NOV-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/308,104
FILING DATE: 16-SEP-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/300,266
FILING DATE: 02-SEP-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/289,221
FILING DATE: 12-AUG-1994
ATTORNEY/AGENT INFORMATION:
NAME: Ihnen, Jeffrey L.

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; REGISTRATION NUMBER: 28,957
; REFERENCE/DOCKET NUMBER: 24884-109347
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 202-962-4810
; TELEFAX: 202-962-8300
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1863 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-487-002-2

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Query Match          99.9%; Score 9642; DB 1; Length 1863;
Best Local Similarity 99.9%; Pred. No. 0;
Matches 1862; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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Qy 1 MDLSALRYEEVONVYINAMOKLIECPICLLEIKPEVSTKCDHIFCKFCMLKILNOKKPSQ 60
Db 1 MDLSALRYEEVONVYINAMOKLIECPICLLEIKPEVSTKCDHIFCKFCMLKILNOKKPSQ 60
Qy 61 CPLCKNDITKRSLOESTRFSOLVRELLKTIICAFOLDGLLEVANSYNPAKKENNSPEHLKD 120
Db 61 CPLCKNDITKRSLOESTRFSOLVRELLKTIICAFOLDGLLEVANSYNPAKKENNSPEHLKD 120
Qy 121 EYSIIQSMGYRRNARARLLOSEPENPSLOETSLVOLSNLGVTRTLTKRIOPQKTSVYI 180
Db 121 EYSIIQSMGYRRNARARLLOSEPENPSLOETSLVOLSNLGVTRTLTKRIOPQKTSVYI 180
Qy 181 ELGSDSSDDYVVKATYCVSGDOELLQITPGTDRDEISIDSKAKKACSEPTDVTNTEHQ 240
Db 181 ELGSDSSDDYVVKATYCVSGDOELLQITPGTDRDEISIDSKAKKACSEPTDVTNTEHQ 240
Qy 241 PSNNDLNTEKRAARHPEKTYOGSSVSNLHVEPGTNTHASLQHESSLLTKFRDNNVE 300
Db 241 PSNNDLNTEKRAARHPEKTYOGSSVSNLHVEPGTNTHASLQHESSLLTKFRDNNVE 300
Qy 301 KAEFCNKSQOPGLARSOHNRWAGSKETCNDRRTSTEEKYVLDNADPLCEKRNKKOLPC 360
Db 301 KAEFCNKSQOPGLARSOHNRWAGSKETCNDRRTSTEEKYVLDNADPLCEKRNKKOLPC 360
Qy 361 SENPDTEDVYMITLNSIQKYNEMFSSDGLSDSDSHGSESNNAKVADYVLDVNEVD 420
Db 361 SENPDTEDVYMITLNSIQKYNEMFSSDGLSDSDSHGSESNNAKVADYVLDVNEVD 420
Qy 421 EYSGSSEKIDLLASDPHALICKSERVSKSVESNIEDKIFGKYRRKASLPLNSHTEN 480
Db 421 EYSGSSEKIDLLASDPHALICKSERVSKSVESNIEDKIFGKYRRKASLPLNSHTEN 480
Qy 481 LIIGAFVTEPQIIQERPLTNKLKRRRPTSGLHPEDEFLKADLAVOQTPMINOQTNQTE 540
Db 481 LIIGAFVTEPQIIQERPLTNKLKRRRPTSGLHPEDEFLKADLAVOQTPMINOQTNQTE 540
Qy 541 ONGOVMTNTSGHENKTKGDSIQNEKNPNPESLEKSAKTAAPRISSISIMMELN 600
Db 541 ONGOVMTNTSGHENKTKGDSIQNEKNPNPESLEKSAKTAAPRISSISIMMELN 600
Qy 601 HNSKAPKKNRRLRRKSTPHIALVYVSRNLSPNCLELOIDSCSSSEETKKKKYQMPV 660
Db 601 HNSKAPKKNRRLRRKSTPHIALVYVSRNLSPNCLELOIDSCSSSEETKKKKYQMPV 660
Qy 661 RHSRNLQMEGKEPATGAKSKSNKPNQTSKRHSDTPPELKLTNAPGSPFKCSNTSELKE 720
Db 661 RHSRNLQMEGKEPATGAKSKSNKPNQTSKRHSDTPPELKLTNAPGSPFKCSNTSELKE 720
Qy 721 FVNSPLPREKEEKLLEVYKVSNNABDKDMLSGERVLQTERVSESSISLVGCTGYGQ 780
Db 721 FVNSPLPREKEEKLLEVYKVSNNABDKDMLSGERVLQTERVSESSISLVGCTGYGQ 780
Qy 781 ESISLLEVSTLGAKTEPNKCVSQCASFENPKGLIHGCSKDNNDNDEGFRYPLGHVYNS 840
Db 781 ESISLLEVSTLGAKTEPNKCVSQCASFENPKGLIHGCSKDNNDNDEGFRYPLGHVYNS 840

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QY 841 RETSIEMESELDAQYLONTFKVSKROSFALFSPNGAEECATFSAHSGSLKKOSPKVT 900
DB 841 RETSIEMESELDAQYLONTFKVSKROSFALFSPNGAEECATFSAHSGSLKKOSPKVT 900
QY 901 FECBOKKEENOGKNEKNIKPVQVNTAGFPVVGOKDRPVDNACKSINGSRFCLSSQFRG 960
DB 901 FECBOKKEENOGKNEKNIKPVQVNTAGFPVVGOKDRPVDNACKSINGSRFCLSSQFRG 960
QY 961 NEGLITIPNKHGLLQNTYRIPPLPFIKSPYKTKCKMLLEENHEHSMSPEREKNGNIP 1020
DB 961 NEGLITIPNKHGLLQNTYRIPPLPFIKSPYKTKCKMLLEENHEHSMSPEREKNGNIP 1020
QY 1021 STVSTISRNINRENVFKEASSSNINEVSSNINEVSSINIEGSSDEIQAELGNRGPKL 1080
DB 1021 STVSTISRNINRENVFKEASSSNINEVSSNINEVSSINIEGSSDEIQAELGNRGPKL 1080
QY 1081 NAMLRILGLVLOPEYVKQSLPGSNCKHPEIKKOEYEEVQVNTDPSPLYLIDNLEQPMGSS 1140
DB 1081 NAMLRILGLVLOPEYVKQSLPGSNCKHPEIKKOEYEEVQVNTDPSPLYLIDNLEQPMGSS 1140
QY 1141 HASQVCEPTDDLLDDEIKEDTSFAANDIKESSAVSKSVQGLSRSPFTHTLAQ 1200
DB 1141 HASQVCEPTDDLLDDEIKEDTSFAANDIKESSAVSKSVQGLSRSPFTHTLAQ 1200
QY 1201 GYRGAKKLESSEENLSEDEELPCFOHLLFGKVNINIPSOSTRSHVATCLSKNTEENTL 1260
DB 1201 GYRGAKKLESSEENLSEDEELPCFOHLLFGKVNINIPSOSTRSHVATCLSKNTEENTL 1260
QY 1261 LSLKNSINDCSNOVILAKASQEHHLSEETKCSASFSSQCSSELDLTANTNTODPFLIGS 1320
DB 1261 LSLKNSINDCSNOVILAKASQEHHLSEETKCSASFSSQCSSELDLTANTNTODPFLIGS 1320
QY 1321 SKOMRHOSEOGVGLSKELVSDDEERGTLLEENNOEOMDSNLSLGAAGCSEETVSSE 1380
DB 1321 SKOMRHOSEOGVGLSKELVSDDEERGTLLEENNOEOMDSNLSLGAAGCSEETVSSE 1380
QY 1381 DCSGLSSQSDILFTQOQDITMOHNLKLOQEMAELEAVLEOHGSOPSYSITSDSALE 1440
DB 1381 DCSGLSSQSDILFTQOQDITMOHNLKLOQEMAELEAVLEOHGSOPSYSITSDSALE 1440
QY 1441 DLNRPEOSTSEKAVLTSQKSEYPISONPEGLSADKFEVASDSTSKNKEPGEVRSRSPK 1500
DB 1441 DLNRPEOSTSEKAVLTSQKSEYPISONPEGLSADKFEVASDSTSKNKEPGEVRSRSPK 1500
QY 1501 CPSTLDDWMYHSCSGSIQNNRNPBQELLIVVVEEQLESGPHDLETSTYLPRODLEG 1560
DB 1501 CPSTLDDWMYHSCSGSIQNNRNPBQELLIVVVEEQLESGPHDLETSTYLPRODLEG 1560
QY 1561 TPYLESGISLFSDDPESDPEDRAREPESARVGNIPSSSTALKVPOLKVAESAQSPAANTT 1620
DB 1561 TPYLESGISLFSDDPESDPEDRAREPESARVGNIPSSSTALKVPOLKVAESAQSPAANTT 1620
QY 1621 DTAGYNAMEEVSREKPELTASTERVNKRMSMVVSGLTPEEFMLVYKFAKKHITLTNLI 1680
DB 1621 DTAGYNAMEEVSREKPELTASTERVNKRMSMVVSGLTPEEFMLVYKFAKKHITLTNLI 1680
QY 1681 TEETHVYVMTDAEFVCEERTLKFLGAGAGKVVSTYVWQOSIKERKMLNEHDFEVAGDV 1740
DB 1681 TEETHVYVMTDAEFVCEERTLKFLGAGAGKVVSTYVWQOSIKERKMLNEHDFEVAGDV 1740
QY 1741 VNGRNHOGPKRARESDOKRIFRGLIEICCYGPTNMPDQLEMMVQOLCGASVVELSFTL 1800
DB 1741 VNGRNHOGPKRARESDOKRIFRGLIEICCYGPTNMPDQLEMMVQOLCGASVVELSFTL 1800
QY 1801 GTGVNPIVVVQPDAMTEDNGFHAIGOMCEAPVVTRENVLDLSVALYCOQELDTYLIPIPH 1860
DB 1801 GTGVNPIVVVQPDAMTEDNGFHAIGOMCEAPVVTRENVLDLSVALYCOQELDTYLIPIPH 1860
QY 1861 SHY 1863
DB 1861 SHY 1863

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RESULT 7
US-08-483-554B-2
; Sequence 2, Application US/08483554B
; Patent No. 5747282
; GENERAL INFORMATION:
; APPLICANT: Skolnick, Mark H.
; APPLICANT: Goldgar, David E.
; APPLICANT: Mikl, Yoshio
; APPLICANT: Swenson, Jeff
; APPLICANT: Kamb, Alexander
; APPLICANT: Harsman, Keith D.
; APPLICANT: Shattuck-Eidens, Donna M.
; APPLICANT: Tavliqian, Sean V.
; APPLICANT: Wiseman, Roger W.
; APPLICANT: Futreal, P. Andrew
; TITLE OF INVENTION: 17q-Linked Breast and Ovarian Cancer
; TITLE OF INVENTION: Susceptibility Gene
; NUMBER OF SEQUENCES: 85
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Venable, Baetjer, Howard & Civiletti, LLP
; STREET: 1201 New York Avenue, N.W., Suite 1000
; CITY: Washington
; STATE: DC
; COUNTRY: USA
; ZIP: 20005
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/483,554B
; FILING DATE: 07-JUN-1995
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/409,305
; FILING DATE: 24-MAR-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/348,824
; FILING DATE: 29-NOV-1994
; APPLICATION NUMBER: US 08/300,266
; FILING DATE: 02-SEP-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/289,221
; FILING DATE: 12-AUG-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Ihnen, Jeffrey L.
; REGISTRATION NUMBER: 28,957
; REFERENCE/DOCKET NUMBER: 24884-109347
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 202-962-4810
; TELEFAX: 202-962-8300
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1863 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-483-554B-2

Query Match 99.9%; Score 9642; DB 1; Length 1863;
Best Local Similarity 99.9%; Pred. No. 0;
Matches 1862; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 MDLSALRVEEVQVNTINAMOKITLCPICLLEIKRPVSTKCHITCKRCKMLKLNOKKGPQ 60
DB 1 MDLSALRVEEVQVNTINAMOKITLCPICLLEIKRPVSTKCHITCKRCKMLKLNOKKGPQ 60
QY 61 CPLCKNDITKRSLOESTRFSQVLVEBKLIICARQOLDIGLEYANSYNRAKKENNSPERLKD 120

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Qy      121  EVSIIOSMGYRNRARRLQSEPNPSLOETSLSVOLSNLGYRTLTKRKRIOPKTSYI 180
Db      121  EVSIIOSMGYRNRARRLQSEPNPSLOETSLSVOLSNLGYRTLTKRKRIOPKTSYI 180
Qy      181  ELGSDSSEDYVWKATYCSVGOELQITPOGTRDEISLDSAKKACEFSETDVTNEHQ 240
Db      181  ELGSDSSEDYVWKATYCSVGOELQITPOGTRDEISLDSAKKACEFSETDVTNEHQ 240
Qy      241  PSNNDLNTTEKRAARHPEKYOGSSVNLHVPCGNTNASSLQHNSSLITKDRMNE 300
Db      241  PSNNDLNTTEKRAARHPEKYOGSSVNLHVPCGNTNASSLQHNSSLITKDRMNE 300
Qy      301  KAEFCNKSKOPGLARSOHNRNAGSKETCNDRTPTSEKKVVDNADPLCRKEMNKOLPC 360
Db      301  KAEFCNKSKOPGLARSOHNRNAGSKETCNDRTPTSEKKVVDNADPLCRKEMNKOLPC 360
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Qy      421  EYSGSSEKIDILASPHALICKSRVHSKSVESNIEDIKFKTKRKASLPLNLSHYTEN 480
Db      421  EYSGSSEKIDILASPHALICKSRVHSKSVESNIEDIKFKTKRKASLPLNLSHYTEN 480
Qy      481  LIIGAFVTEPOIIORPLTNLKRKRRTSGLHPEDFIKKADLAVOKTPEMINOGNOTE 540
Db      481  LIIGAFVTEPOIIORPLTNLKRKRRTSGLHPEDFIKKADLAVOKTPEMINOGNOTE 540
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Db      601  HNSKAPKKNRLBRKSTRIHALELYVRNLSPPCTELQIDSCSSSEIKKKKNOMPV 660
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Qy      721  FVNSLSPREKEKELETKVSNNAEDPDMLSGRVTQTERSVSSSISLVPGDYGTQ 780
Db      721  FVNSLSPREKEKELETKVSNNAEDPDMLSGRVTQTERSVSSSISLVPGDYGTQ 780
Qy      781  ESISLLEYSTLGAKTEBPNKCVSOCAAFENPKGLHGSKDRNDTBEFKYPLGHEVNS 840
Db      781  ESISLLEYSTLGAKTEBPNKCVSOCAAFENPKGLHGSKDRNDTBEFKYPLGHEVNS 840
Qy      841  RETSIEMEBESLDAQYLONTFKVSKROSFALFSPNGNAEBCATFSAHSGSLKQSPKY 900
Db      841  RETSIEMEBESLDAQYLONTFKVSKROSFALFSPNGNAEBCATFSAHSGSLKQSPKY 900
Qy      901  FECOKRENGKNSNITKPVQTVNITAGFPVQKDKRVYNAKCSIKGSRFCLSSQORG 960
Db      901  FECOKRENGKNSNITKPVQTVNITAGFPVQKDKRVYNAKCSIKGSRFCLSSQORG 960
Qy      961  NETGLITPNKHGLQONFYRIPPLPPIKSVFKTKCKNLEENFEHSHSPREKMGNEIP 1020
Db      961  NETGLITPNKHGLQONFYRIPPLPPIKSVFKTKCKNLEENFEHSHSPREKMGNEIP 1020
Qy      1021  STVSTISRNINRENVFEASSNINEVGSSSTNEVGSSINELGSDENIQAELGRNRGPKL 1080
Db      1021  STVSTISRNINRENVFEASSNINEVGSSSTNEVGSSINELGSDENIQAELGRNRGPKL 1080
Qy      1081  NAMRLGVLQPEYVKOSLPGSNCHNPEIKKOEYEVQVTVTDSPLYISINLEQPMGSS 1140
Db      1081  NAMRLGVLQPEYVKOSLPGSNCHNPEIKKOEYEVQVTVTDSPLYISINLEQPMGSS 1140
Qy      1141  HASOVCSPTDDLLDGEIKEIDTSPAENDIKESSAVFSKVOGELSRSPFTHTHAQ 1200

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Db      1141  HASOVCSPTDDLLDGEIKEIDTSPAENDIKESSAVFSKVOGELSRSPFTHTHAQ 1200
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Db      1201  GYRRRAKLTESSEENLSSSEDELPFCQFOLLGKYNNTIPSOSTRSTYATCISNTENT 1260
Qy      1261  ISLKNSLNDCSNOVILAKASOEHLSEETKCSASFSSQCELEDLANTNTODFLIGS 1320
Db      1261  ISLKNSLNDCSNOVILAKASOEHLSEETKCSASFSSQCELEDLANTNTODFLIGS 1320
Qy      1321  SKOMRHOSEOGVGLSDKELYSDBERGTGLEENNOBOSMDSNLGFAAGCSESTVSE 1380
Db      1321  SKOMRHOSEOGVGLSDKELYSDBERGTGLEENNOBOSMDSNLGFAAGCSESTVSE 1380
Qy      1381  DCSGLSSODLITTOQRTMOHNLKIQOEAELEAVLEOHGOSPSSYSTIISDSALE 1440
Db      1381  DCSGLSSODLITTOQRTMOHNLKIQOEAELEAVLEOHGOSPSSYSTIISDSALE 1440
Qy      1441  DLNRPEQSTSEKAVLTSQKSESEPISONPEGLSADKFEVSADSTSKNKEPVERSSPSK 1500
Db      1441  DLNRPEQSTSEKAVLTSQKSESEPISONPEGLSADKFEVSADSTSKNKEPVERSSPSK 1500
Qy      1501  CPSLDDRWYMHSCSGLONRNYPSOEELIKVVDVEOQLESGPHDLTETSYLPDOLDS 1560
Db      1501  CPSLDDRWYMHSCSGLONRNYPSOEELIKVVDVEOQLESGPHDLTETSYLPDOLDS 1560
Qy      1561  TPYLESGISLFSDDPESDPESDRAPEARSAGVNISSSALVKPOLKVAESAQSPAANT 1620
Db      1561  TPYLESGISLFSDDPESDPESDRAPEARSAGVNISSSALVKPOLKVAESAQSPAANT 1620
Qy      1621  DTAGYNAMEESVREKPELTASTERYVNRKMSMVVSGLTPEEFMLVYKFAKHHTITLNL 1680
Db      1621  DTAGYNAMEESVREKPELTASTERYVNRKMSMVVSGLTPEEFMLVYKFAKHHTITLNL 1680
Qy      1681  TEETHVYMKTDAPFVOCRTLYFLGAGKVVVSYVMWOSIKERKMLNEHOFVGRGV 1740
Db      1681  TEETHVYMKTDAPFVOCRTLYFLGAGKVVVSYVMWOSIKERKMLNEHOFVGRGV 1740
Qy      1741  VNGRNHOGPKRARSODRKIFRGLEICCYGFTNMPDQLEMMVQJLGASVARELSFTL 1800
Db      1741  VNGRNHOGPKRARSODRKIFRGLEICCYGFTNMPDQLEMMVQJLGASVARELSFTL 1800
Qy      1801  GTGVHPYVQPDAMTEBNGFHAIGOMCEAPVYTRVWLDVALYOCOEIDLYLIPDIP 1860
Db      1801  GTGVHPYVQPDAMTEBNGFHAIGOMCEAPVYTRVWLDVALYOCOEIDLYLIPDIP 1860
Qy      1861  SHY 1863
Db      1861  SHY 1863

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RESULT 8
US-08-488-011B-2
: Sequence 2, Affiliation US/08488011B
: Patent No. 5753441
: GENERAL INFORMATION:
: APPLICANT: Skolnick, Mark H.
: APPLICANT: Goldgar, David E.
: APPLICANT: Miki, Yoshio
: APPLICANT: Swenson, Jeff
: APPLICANT: Kamp, Alexander
: APPLICANT: Harshman, Keith D.
: APPLICANT: Shattuck-Eidens, Donna M.
: APPLICANT: Tavtigian, Sean V.
: APPLICANT: Wiseman, Roger W.
: APPLICANT: Futreal, P. Andrew
: TITLE OF INVENTION: 17q-Linked Breast and Ovarian Cancer
: TITLE OF INVENTION: Susceptibility Gene
: NUMBER OF SEQUENCES: 85
: CORRESPONDENCE ADDRESS:
: ADDRESSEE: Venable, Baetjer, Howard & Civiletti, LLP
: STREET: 1201 New York Avenue, N.W., Suite 1000
: CITY: Washington

```

STATE: DC
COUNTRY: USA
ZIP: 20005
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/488,011B
FILING DATE: 07-JUN-1995
CLASSIFICATION: 435
PRIORITY APPLICATION DATA:
APPLICATION NUMBER: US 08/409,305
FILING DATE: 24-MAR-1995
PRIORITY APPLICATION DATA:
APPLICATION NUMBER: US 08/348,824
FILING DATE: 29-NOV-1994
PRIORITY APPLICATION DATA:
APPLICATION NUMBER: US 08/308,104
FILING DATE: 16-SEP-1994
PRIORITY APPLICATION DATA:
APPLICATION NUMBER: US 08/300,266
FILING DATE: 02-SEP-1994
PRIORITY APPLICATION DATA:
APPLICATION NUMBER: US 08/289,221
FILING DATE: 12-AUG-1994
ATTORNEY/AGENT INFORMATION:
NAME: Ihnen, Jeffrey L.
REGISTRATION NUMBER: 28,957
REFERENCE/DOCKET NUMBER: 24884-109347-09
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-962-4810
TELEFAX: 202-962-8300
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 1863 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-488-011B-2

QY 1501 CPSIDDDRWYHSCSGSLQNNRNPQSOELLKVVYVVEEQOLEESGPHDLTETSYLPRODLEG 1560
 DB 1501 CPSIDDDRWYHSCSGSLQNNRNPQSOELLKVVYVVEEQOLEESGPHDLTETSYLPRODLEG 1560
 QY 1561 TPYLESGISLSPDPESDPSDEDRAPESARVGNIPSTSAKLPOLKVAESQSPAATHT 1620
 DB 1561 TPYLESGISLSPDPESDPSDEDRAPESARVGNIPSTSAKLPOLKVAESQSPAATHT 1620
 QY 1621 DTAGYNAMESVSREKPELTASTERNRKMMSVSGLPPEERMLYKARKHHTLNL 1680
 DB 1621 DTAGYNAMESVSREKPELTASTERNRKMMSVSGLPPEERMLYKARKHHTLNL 1680
 QY 1681 TEFTTHVYMKDAEFVCERTLKYLGLGAGKVVVSFYFWTOSIKERKMLNEHDFEVRGDV 1740
 DB 1681 TEFTTHVYMKDAEFVCERTLKYLGLGAGKVVVSFYFWTOSIKERKMLNEHDFEVRGDV 1740
 QY 1741 VNGRNHOGPKRARSODKIRFGLGICCYGPTNNPTQOLEMMVOLGASVYKELSSFTL 1800
 DB 1741 VNGRNHOGPKRARSODKIRFGLGICCYGPTNNPTQOLEMMVOLGASVYKELSSFTL 1800
 QY 1801 GTGVHPIVYVQPDAMTEEDNGFHAIGOMCEAPVYREVLDSVATYQCELDYLLIPQIPH 1860
 DB 1801 GTGVHPIVYVQPDAMTEEDNGFHAIGOMCEAPVYREVLDSVATYQCELDYLLIPQIPH 1860
 QY 1861 SHY 1863
 DB 1861 SHY 1863

RESULT 9
 US-08-850-727-2
 ; Sequence 2, Application US/08850727
 ; Patent No. 6162897
 ; GENERAL INFORMATION:
 ; APPLICANT: Skolnick, Mark H.
 ; APPLICANT: Goldgar, David E.
 ; APPLICANT: Mikl, Yoshio
 ; APPLICANT: Swenson, Jeff
 ; APPLICANT: Kamb, Alexander
 ; APPLICANT: Harshman, Keith D.
 ; APPLICANT: Shattuck-Eidens, Donna M.
 ; APPLICANT: Tavligian, Sean V.
 ; APPLICANT: Wiseman, Roger W.
 ; APPLICANT: Futreal, P. Andrew
 ; TITLE OF INVENTION: 17q-Linked Breast and Ovarian Cancer
 ; TITLE OF INVENTION: Susceptibility Gene
 ; NUMBER OF SEQUENCES: 85
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Venable, Baetjer, Howard & Civiletti, LLP
 ; STREET: 1201 New York Avenue, N.W., Suite 1000
 ; CITY: Washington
 ; STATE: DC
 ; COUNTRY: USA
 ; ZIP: 20005
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: PatentIn Release #1.0, Version #1.30
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/850,727
 ; FILING DATE:
 ; CLASSIFICATION:
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: US 08/483,554
 ; FILING DATE: 07-JUN-1995
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: US 08/348,824
 ; FILING DATE: 29-NOV-1994
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: US 08/308,104
 ; FILING DATE: 16-SEP-1994
 ; PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/300,266
 FILING DATE: 02-SEP-1994
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/289,221
 FILING DATE: 12-AUG-1994
 ATTORNEY/AGENT INFORMATION:
 NAME: Ihnen, Jeffrey L.
 REGISTRATION NUMBER: 28,957
 REFERENCE/DOCKET NUMBER: 24884-109347
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: 202-962-4810
 TELEFAX: 202-962-8300
 INFORMATION FOR SEQ ID NO: 2:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 1863 amino acids
 TYPE: amino acid
 TOPOLOGY: linear
 MOLECULE TYPE: protein
 US-08-850-727-2

Query Match 99.9%; Score 9642; DB 4; Length 1863;
 Best Local Similarity 99.9%; Pred. No. 0;
 Matches 1862; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 MDLSALRYEEVQYVYINAMOKTLECPICLLEIKPEVSTKCDHIFCKPOMKLNOKKGPQ 60
 DB 1 MDLSALRYEEVQYVYINAMOKTLECPICLLEIKPEVSTKCDHIFCKPOMKLNOKKGPQ 60
 QY 61 CPLCKNDITKRSLOESTRFQSOLVVELKIIICAFOLDTGLRYANSYNPAKKENNSPEHLND 120
 DB 61 CPLCKNDITKRSLOESTRFQSOLVVELKIIICAFOLDTGLRYANSYNPAKKENNSPEHLND 120
 QY 121 EVSIISQMGYNRRARRLLQSEPNPSSLOETSLVQSLNIGTVRTLRTKRIQPKTSYVI 180
 DB 121 EVSIISQMGYNRRARRLLQSEPNPSSLOETSLVQSLNIGTVRTLRTKRIQPKTSYVI 180
 QY 181 ELGSDSSPDYVNAKTCYGVGOELLQTTPOGTREISLDSAKKACCFSTDTYTNHHQ 240
 DB 181 ELGSDSSPDYVNAKTCYGVGOELLQTTPOGTREISLDSAKKACCFSTDTYTNHHQ 240
 QY 181 ELGSDSSPDYVNAKTCYGVGOELLQTTPOGTREISLDSAKKACCFSTDTYTNHHQ 240
 DB 181 ELGSDSSPDYVNAKTCYGVGOELLQTTPOGTREISLDSAKKACCFSTDTYTNHHQ 240
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 DB 241 PSNNDLNTTEKRAERHPEKYGQSSVSNLHVEPGTTHASSLOHENSILLTKRDMNYE 300
 QY 241 PSNNDLNTTEKRAERHPEKYGQSSVSNLHVEPGTTHASSLOHENSILLTKRDMNYE 300
 DB 241 PSNNDLNTTEKRAERHPEKYGQSSVSNLHVEPGTTHASSLOHENSILLTKRDMNYE 300
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 DB 301 KAEFCNKSQGLARSOHNRWAGSKETCNDRRPTSTKRYVLANADPLCERKENNKKLPC 360
 QY 301 KAEFCNKSQGLARSOHNRWAGSKETCNDRRPTSTKRYVLANADPLCERKENNKKLPC 360
 DB 301 KAEFCNKSQGLARSOHNRWAGSKETCNDRRPTSTKRYVLANADPLCERKENNKKLPC 360
 QY 361 SENRDTEDYVWITLNSIQKVNWFERSRDELLGSDSDSHGSEESNAKAYADVLDVINEVD 420
 DB 361 SENRDTEDYVWITLNSIQKVNWFERSRDELLGSDSDSHGSEESNAKAYADVLDVINEVD 420
 QY 361 SENRDTEDYVWITLNSIQKVNWFERSRDELLGSDSDSHGSEESNAKAYADVLDVINEVD 420
 DB 361 SENRDTEDYVWITLNSIQKVNWFERSRDELLGSDSDSHGSEESNAKAYADVLDVINEVD 420
 QY 421 EYSGSSSEKIDLLASDPHEALICKSERVHASKVESNIEDKIFGTYRKKAISPLSLSVTEN 480
 DB 421 EYSGSSSEKIDLLASDPHEALICKSERVHASKVESNIEDKIFGTYRKKAISPLSLSVTEN 480
 QY 421 EYSGSSSEKIDLLASDPHEALICKSERVHASKVESNIEDKIFGTYRKKAISPLSLSVTEN 480
 DB 421 EYSGSSSEKIDLLASDPHEALICKSERVHASKVESNIEDKIFGTYRKKAISPLSLSVTEN 480
 QY 481 LIIGAFYTEPQIIQERPLTKLKKRRRPTSGLPHEDEFIKKADLAVOYKTEPMINOGTQNE 540
 DB 481 LIIGAFYTEPQIIQERPLTKLKKRRRPTSGLPHEDEFIKKADLAVOYKTEPMINOGTQNE 540
 QY 541 QNGGVNMTNSGHENKTKGDSIQNEKNPNPISLEKESAKTYAEPISISSIMELINI 600
 DB 541 QNGGVNMTNSGHENKTKGDSIQNEKNPNPISLEKESAKTYAEPISISSIMELINI 600
 QY 541 QNGGVNMTNSGHENKTKGDSIQNEKNPNPISLEKESAKTYAEPISISSIMELINI 600
 DB 541 QNGGVNMTNSGHENKTKGDSIQNEKNPNPISLEKESAKTYAEPISISSIMELINI 600
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 DB 601 HNSKAPKKNRRLRRKSTRHIALEIVYSRMLSPNCTELQIDSCSSSEIKKKRYNQMPV 660
 QY 601 HNSKAPKKNRRLRRKSTRHIALEIVYSRMLSPNCTELQIDSCSSSEIKKKRYNQMPV 660
 DB 601 HNSKAPKKNRRLRRKSTRHIALEIVYSRMLSPNCTELQIDSCSSSEIKKKRYNQMPV 660
 QY 661 RHSRNLQIMEGKEPATGAKSKSNPNEDTSKRHSDTFPELKLTNAGSFTKCSNTSELKE 720
 DB 661 RHSRNLQIMEGKEPATGAKSKSNPNEDTSKRHSDTFPELKLTNAGSFTKCSNTSELKE 720
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 DB 661 RHSRNLQIMEGKEPATGAKSKSNPNEDTSKRHSDTFPELKLTNAGSFTKCSNTSELKE 720
 QY 721 FVNPISLPREREKEKLEIVKYVSNNAEDPKDMLSGERYLOTREKVSSESSISLVPGDYGTQ 780


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Db      721 FVNPSLPREEKEERLETVKVSNNADPKDMLSGERVLTQTERSVSSSTLSLPGDYGQ 780
QY      781 ESISLLEVTJGCKATEPNCVCQAFAENPKGLHGCSKDNRNTEGFKYVLGHEVNH 840
Db      781 ESISLLEVTJGCKATEPNCVCQAFAENPKGLHGCSKDNRNTEGFKYVLGHEVNH 840
QY      841 RETSIEMESELDAQYLONTFKVSKROSFALFNSNGNAEECATSAHSGSLKQSPKVT 900
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QY      901 FECEQKEENQGNESNIKPVQVTNTAGFPVVGQKDKPDVNAKCSIKGSGRCLSSQFNG 960
Db      901 FECEQKEENQGNESNIKPVQVTNTAGFPVVGQKDKPDVNAKCSIKGSGRCLSSQFNG 960
QY      961 NETGLITPNKRGHLLONPRIPPLPKSFVKTKCKKNLLEENFEHSHMSPEREMGNENIP 1020
Db      961 NETGLITPNKRGHLLONPRIPPLPKSFVKTKCKKNLLEENFEHSHMSPEREMGNENIP 1020
QY      1021 STVSTISRNNTIRENFKEASSNINEVGSSTNEVGSSINETSDENTQAEIGRRGPPL 1080
Db      1021 STVSTISRNNTIRENFKEASSNINEVGSSTNEVGSSINETSDENTQAEIGRRGPPL 1080
QY      1081 NAMRLGYLOPEVYKQSLPGSNCKHPEIKQEEVVOVTNTDFSPYLLSDMLEQPMGSS 1140
Db      1081 NAMRLGYLOPEVYKQSLPGSNCKHPEIKQEEVVOVTNTDFSPYLLSDMLEQPMGSS 1140
QY      1141 HASOVCSETPDDLLDGEKETSTFAENDIKESSAVFSKSVQKGLSPSPFTTHLAQ 1200
Db      1141 HASOVCSETPDDLLDGEKETSTFAENDIKESSAVFSKSVQKGLSPSPFTTHLAQ 1200
QY      1201 GYRRGAKLSESEENMLSEDELPFCOHLHFGKVNIPSOGRHSTVATECISKTEENL 1260
Db      1201 GYRRGAKLSESEENMLSEDELPFCOHLHFGKVNIPSOGRHSTVATECISKTEENL 1260
QY      1261 LSLKNSLDCSNQVILARAQEHLSSEETKCSASLFSQCSLEEDLTANTNTQDPFLIGS 1320
Db      1261 LSLKNSLDCSNQVILARAQEHLSSEETKCSASLFSQCSLEEDLTANTNTQDPFLIGS 1320
QY      1321 SKOMHOSESGVIGSDKEIVSDDEERGTGLEENQOEQSDMSNNGEASGCESTSVSE 1380
Db      1321 SKOMHOSESGVIGSDKEIVSDDEERGTGLEENQOEQSDMSNNGEASGCESTSVSE 1380
QY      1381 DCSGSSOSDILITTOQRDTMOHNLKLOEAMAEAVLEQHSQSPNSYPTISSSALE 1440
Db      1381 DCSGSSOSDILITTOQRDTMOHNLKLOEAMAEAVLEQHSQSPNSYPTISSSALE 1440
QY      1441 DLRNPEQSTSEKAVLTSQKSEYPISONPEGLSADKFEVSADSTSKNKEPVERSSPSK 1500
Db      1441 DLRNPEQSTSEKAVLTSQKSEYPISONPEGLSADKFEVSADSTSKNKEPVERSSPSK 1500
QY      1501 CPSLDDRWYMHSCSSSLQNRNPPSOBELIKYVDVEQOLEBSPDLTETSLPQDLEB 1560
Db      1501 CPSLDDRWYMHSCSSSLQNRNPPSOBELIKYVDVEQOLEBSPDLTETSLPQDLEB 1560
QY      1561 TPYLESGISLFSDDPESDSEDRAPESARVGNIPSTSAKLPQKVAESAQSPAATHT 1620
Db      1561 TPYLESGISLFSDDPESDSEDRAPESARVGNIPSTSAKLPQKVAESAQSPAATHT 1620
QY      1621 DTAGNAMEESVSREKPELTAISTERVNRMSVNVGSLPPEEFMLVYKFAARKHITLTNLI 1680
Db      1621 DTAGNAMEESVSREKPELTAISTERVNRMSVNVGSLPPEEFMLVYKFAARKHITLTNLI 1680
QY      1681 TEETHHYVMKTDAEVFCERTLKYFLGIAGKVMVSYFWVQSIKRRKMLNEHDFEVRD 1740
Db      1681 TEETHHYVMKTDAEVFCERTLKYFLGIAGKVMVSYFWVQSIKRRKMLNEHDFEVRD 1740
QY      1741 VNGRHHQPKRARESDRKIFRGLEICCYGPTNPTQLEWVQLCGASVYKELSSFTL 1800
Db      1741 VNGRHHQPKRARESDRKIFRGLEICCYGPTNPTQLEWVQLCGASVYKELSSFTL 1800
QY      1801 GTGVHPYVOPDAWTEBNGFHAIGOMCEAPVTRREWLDSVALYQCOELDTYLLPQIPH 1860

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Db      1801 GTGVHPYVOPDAWTEBNGFHAIGOMCEAPVTRREWLDSVALYQCOELDTYLLPQIPH 1860
QY      1861 SHY 1863
Db      1861 SHY 1863

RESULT 10
PCT-US95-10202-2
; Sequence 2, Application PC/TUS9510202
; GENERAL INFORMATION:
; APPLICANT: Shattuck-Eidens, Donna M.
; APPLICANT: Simard, Jacques
; APPLICANT: Eml, Mitsuru
; APPLICANT: Nakamura, Yusuke
; APPLICANT: Durocher, Francine
; TITLE OF INVENTION: In Vivo Mutations and Polymorphisms
; TITLE OF INVENTION: in the 17q-Linked Breast and Ovarian Cancer
; NUMBER OF SEQUENCES: 85
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Venable, Baetjer, Howard & Civiletti, LLP
; STREET: 1201 New York Avenue, N.W., Suite 1000
; CITY: Washington
; STATE: DC
; COUNTRY: USA
; ZIP: 20005
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US95/10202
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US
; FILING DATE: 07-JUN-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/409,305
; FILING DATE: 24-MAR-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/348,824
; FILING DATE: 29-NOV-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08-308,104
; FILING DATE: 16-SEP-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/300,266
; FILING DATE: 02-SEP-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/289,221
; FILING DATE: 12-AUG-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Innen, Jeffrey L.
; REGISTRATION NUMBER: 28,957
; REFERENCE/DOCKET NUMBER: 24884-109347
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 202-962-4810
; TELEFAX: 202-962-8300
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1863 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; PCT-US95-10202-2

Query Match      99.9%; Score 9642; DB 5; Length 1863;
Best Local Similarity 99.9%; Pred. No. 0;
Matches 1862; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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QY 1 MDLSALRVEEYQVNTINAMOKIIECPICLLEIKEPVSTKCDHIFCKFCMKLLNOKKPSQ 60
 Db 1 MDLSALRVEEYQVNTINAMOKIIECPICLLEIKEPVSTKCDHIFCKFCMKLLNOKKPSQ 60
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 QY 121 EVSIIOSMGYNRAKRLQSEPNESLQETLSVOLSNLGVRTIKTORIOPKTSYVI 180
 Db 121 EVSIIOSMGYNRAKRLQSEPNESLQETLSVOLSNLGVRTIKTORIOPKTSYVI 180
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 Db 181 ELGSDSSEDYVNTKATYCVGDOELLQITPOGTRDEISLDSAKAACSESTVYTNHHQ 240
 QY 241 PSNNDLNTTEKRAERHPEKTYOGSSVSNLHVEPCGNTNTHASSLOHENSLLTKRMANE 300
 Db 241 PSNNDLNTTEKRAERHPEKTYOGSSVSNLHVEPCGNTNTHASSLOHENSLLTKRMANE 300
 QY 301 KAEFCNKSQOPGLARSOHNRWAGSKETCNDRTPTSTKRVLDNLADPLCERKEMNKOKLPC 360
 Db 301 KAEFCNKSQOPGLARSOHNRWAGSKETCNDRTPTSTKRVLDNLADPLCERKEMNKOKLPC 360
 QY 361 SENRDPEDVPMITLNSIOKVNEFSSRDELGSDSDHGESNAKAVDVLNEDV 420
 Db 361 SENRDPEDVPMITLNSIOKVNEFSSRDELGSDSDHGESNAKAVDVLNEDV 420
 QY 421 EYSSSEKIDLLASDPHALICKSERVHASKVESNIEDKIFGTYRKRAKSLPNLSHTEN 480
 Db 421 EYSSSEKIDLLASDPHALICKSERVHASKVESNIEDKIFGTYRKRAKSLPNLSHTEN 480
 QY 481 LIICAFYTEPQIIIOERPLTNKLKRRRPTSGLHPEDFTKADLAVOKTPREMIINOCTOTE 540
 Db 481 LIICAFYTEPQIIIOERPLTNKLKRRRPTSGLHPEDFTKADLAVOKTPREMIINOCTOTE 540
 QY 541 ONGOVMTNNGCHNKTKGDSIQNEKNNPTEISLEKESAFKTKAPJSSSISNMLELNI 600
 Db 541 ONGOVMTNNGCHNKTKGDSIQNEKNNPTEISLEKESAFKTKAPJSSSISNMLELNI 600
 QY 601 HNSKAPKKNRLRKSTSTRIHALLELYSRNLSPNCTELOIDSCSSSEIKKKKNOMPV 660
 Db 601 HNSKAPKKNRLRKSTSTRIHALLELYSRNLSPNCTELOIDSCSSSEIKKKKNOMPV 660
 QY 661 RHSNRLQMEGKEPATGAKKSNKPNEQTSKRHSDPTPELKLITNAPGSFTKCSNTSEKE 720
 Db 661 RHSNRLQMEGKEPATGAKKSNKPNEQTSKRHSDPTPELKLITNAPGSFTKCSNTSEKE 720
 QY 721 FVNPSLPREEKEKLETVKYVSNNAEDPKDMLSGSRVLOTERSVSSSISLVPGTDYGTQ 780
 Db 721 FVNPSLPREEKEKLETVKYVSNNAEDPKDMLSGSRVLOTERSVSSSISLVPGTDYGTQ 780
 QY 781 ESISLLEVSTLGAKTEBPNKCVSACAFAENPKGLHGCSDKDRNDTEBGFYPLGHEVNS 840
 Db 781 ESISLLEVSTLGAKTEBPNKCVSACAFAENPKGLHGCSDKDRNDTEBGFYPLGHEVNS 840
 QY 841 REISIEESELDAQYLONTFKVSKROSFALFSPNGAAEECAATFSAHSGSLKROSPRYT 900
 Db 841 REISIEESELDAQYLONTFKVSKROSFALFSPNGAAEECAATFSAHSGSLKROSPRYT 900
 QY 901 FECCOKEENGKNSNITKPVQTVNITAGFPVVGOKDKRVDAKCSIKRGSFCLSSQORG 960
 Db 901 FECCOKEENGKNSNITKPVQTVNITAGFPVVGOKDKRVDAKCSIKRGSFCLSSQORG 960
 QY 961 NETGLITPNKHGLONPVRIPPLPFIKSFVTKCKKNLLENFEEHSHPREMGENTIP 1020
 Db 961 NETGLITPNKHGLONPVRIPPLPFIKSFVTKCKKNLLENFEEHSHPREMGENTIP 1020
 QY 1021 STYSTIRNNIRENVEKEASSNINEVGSSSTNEVGSSINETGSSDENTQAEIGRNRGPKL 1080
 Db 1021 STYSTIRNNIRENVEKEASSNINEVGSSSTNEVGSSINETGSSDENTQAEIGRNRGPKL 1080
 QY 1081 NAMRLGVLOPEVYKQSLPGSNCKHPEIKKQYEVEVQVNTDPSPLYISDNLEQPMGSS 1140

Db 1081 NAMRLGVLOPEVYKQSLPGSNCKHPEIKKQYEVEVQVNTDPSPLYISDNLEQPMGSS 1140
 QY 1141 HASOYCSFETPDLLDGDGEIKEDTSPAENDIKRESSAVFSKSVQKELSRSPFTHTLAAQ 1200
 Db 1141 HASOYCSFETPDLLDGDGEIKEDTSPAENDIKRESSAVFSKSVQKELSRSPFTHTLAAQ 1200
 QY 1201 GYRGAKKLSESEENLSEDEBLPCFOHLIFGKVNNIIPSOSTRSTVATECLSKNTEENL 1260
 Db 1201 GYRGAKKLSESEENLSEDEBLPCFOHLIFGKVNNIIPSOSTRSTVATECLSKNTEENL 1260
 QY 1261 ISLANSINDCSNOVILLAAASQEHLSSEETKCSASLFSQCSGELEDLITANTQDPELIGS 1320
 Db 1261 ISLANSINDCSNOVILLAAASQEHLSSEETKCSASLFSQCSGELEDLITANTQDPELIGS 1320
 QY 1321 SKOMRHOSESQGVGLSDKEIYSDDEERGTGLEENNOEBSQSDMSNLGEAASCESETVSE 1380
 Db 1321 SKOMRHOSESQGVGLSDKEIYSDDEERGTGLEENNOEBSQSDMSNLGEAASCESETVSE 1380
 QY 1381 DCSGLSOSDILITTOQORDTMOHNLKIQOEMAELEAVLEQHSQSPSNSYPSIISDSALE 1440
 Db 1381 DCSGLSOSDILITTOQORDTMOHNLKIQOEMAELEAVLEQHSQSPSNSYPSIISDSALE 1440
 QY 1441 DLRNPEOSTSEKAVLTSQKSESEYPISONPEGLSADKEFEVNSDSTSKNKEPVERSSPSK 1500
 Db 1441 DLRNPEOSTSEKAVLTSQKSESEYPISONPEGLSADKEFEVNSDSTSKNKEPVERSSPSK 1500
 QY 1501 CPSLDDRWYMHSCGSLQNRNYPPOEELIKVVDVEEQOLEBSGPHDLTETSYLPRODLEG 1560
 Db 1501 CPSLDDRWYMHSCGSLQNRNYPPOEELIKVVDVEEQOLEBSGPHDLTETSYLPRODLEG 1560
 QY 1561 TPYLESGISLSPDDPESDPSDRAEPESARVGNIPSSSALKVPOLKVAEBSQSPAANTT 1620
 Db 1561 TPYLESGISLSPDDPESDPSDRAEPESARVGNIPSSSALKVPOLKVAEBSQSPAANTT 1620
 QY 1621 DTAGNAMEEVSREKPELTASTERYNKRMSVVSGLPBEFMYVFAKHHHTLTNL 1680
 Db 1621 DTAGNAMEEVSREKPELTASTERYNKRMSVVSGLPBEFMYVFAKHHHTLTNL 1680
 QY 1681 TEETHYVVMKTDAEFVCEBRTLYFGLIAGKRVVSYFVWYOSIKERRMLNEHDFEVGCV 1740
 Db 1681 TEETHYVVMKTDAEFVCEBRTLYFGLIAGKRVVSYFVWYOSIKERRMLNEHDFEVGCV 1740
 QY 1741 VNGRNHQPKRARESODKIRTRGLEICCYGFTMPPTDQLEMMVQLCGASVVELSFTL 1800
 Db 1741 VNGRNHQPKRARESODKIRTRGLEICCYGFTMPPTDQLEMMVQLCGASVVELSFTL 1800
 QY 1801 GTGVHPVYVQPDAMTEDENGFHAIGOMCEAPVYVREAVLDSVALYOCQELDLYLIPQIP 1860
 Db 1801 GTGVHPVYVQPDAMTEDENGFHAIGOMCEAPVYVREAVLDSVALYOCQELDLYLIPQIP 1860
 QY 1861 SHY 1863
 Db 1861 SHY 1863

RESULT 11
 PCT-US95-10203-2
 : Sequence 2, Application PC/TUS9510203
 : GENERAL INFORMATION:
 : APPLICANT: Skolnick, Mark H.
 : APPLICANT: Goldgar, David E.
 : APPLICANT: Mikl, Yoshio
 : APPLICANT: Swenson, Jeff
 : APPLICANT: Kambo, Alexander
 : APPLICANT: Harshman, Keith D.
 : APPLICANT: Shattuck-Eidens, Donna M.
 : APPLICANT: Tavtiglian, Sean V.
 : APPLICANT: Wiseman, Roger W.
 : APPLICANT: Futreal, P. Andrew
 : TITLE OF INVENTION: 17q-Linked Breast and Ovarian Cancer
 : TITLE OF INVENTION: Susceptibility Gene
 : NUMBER OF SEQUENCES: 85

```

CORRESPONDENCE ADDRESS:
ADDRESSEE: Venable, Baetjer, Howard & Civiletti, LLP
STREET: 1201 New York Avenue, N.W., Suite 1000
CITY: Washington
STATE: DC
COUNTRY: USA
ZIP: 20005
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US95/10203
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US
FILING DATE: 07-JUN-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/409,305
FILING DATE: 24-MAR-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/348,824
FILING DATE: 29-NOV-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08-308,104
FILING DATE: 16-SEP-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/300,266
FILING DATE: 02-SEP-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/289,221
FILING DATE: 12-AUG-1994
ATTORNEY/AGENT INFORMATION:
NAME: Ihnen, Jeffrey L.
REGISTRATION NUMBER: 28,957
REFERENCE/DOCKET NUMBER: 24884-109347
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-962-4810
TELEFAX: 202-962-8300
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 1863 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
PCT-0595-10203-2

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Query Match 99.9%; Score 9642; DB 5; Length 1863;

Best Local Similarity 99.9%; Pred. No. 0; Mismatches 1; Indels 0; Gaps 0;

Matches 1862; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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QY 1 MDLSALRYEEVQNTVINAMOKILCEPICLELKEPVSTKCDHIFCFMCKILINOKKGPQ 60
DB 1 MDLSALRYEEVQNTVINAMOKILCEPICLELKEPVSTKCDHIFCFMCKILINOKKGPQ 60
QY 61 CPICNDITKRSLSQESTFVSQVLELKITICAFOLDTGLEAYNSYNFAKKENNSPEHLKD 120
DB 61 CPICNDITKRSLSQESTFVSQVLELKITICAFOLDTGLEAYNSYNFAKKENNSPEHLKD 120
QY 61 CPICNDITKRSLSQESTFVSQVLELKITICAFOLDTGLEAYNSYNFAKKENNSPEHLKD 120
DB 61 CPICNDITKRSLSQESTFVSQVLELKITICAFOLDTGLEAYNSYNFAKKENNSPEHLKD 120
QY 121 EVSIIOSMGYNRRKARLLQSEPEPNSLOETSLVSQVLSMGTIVRTLRTQRIOPOKTSYI 180
DB 121 EVSIIOSMGYNRRKARLLQSEPEPNSLOETSLVSQVLSMGTIVRTLRTQRIOPOKTSYI 180
QY 121 EVSIIOSMGYNRRKARLLQSEPEPNSLOETSLVSQVLSMGTIVRTLRTQRIOPOKTSYI 180
DB 121 EVSIIOSMGYNRRKARLLQSEPEPNSLOETSLVSQVLSMGTIVRTLRTQRIOPOKTSYI 180
QY 181 ELGSDSSEDTVNAKATYCSVGOEELQITPGSTRDEISLDSAKKACERSETDVTTEHHQ 240
DB 181 ELGSDSSEDTVNAKATYCSVGOEELQITPGSTRDEISLDSAKKACERSETDVTTEHHQ 240
QY 181 ELGSDSSEDTVNAKATYCSVGOEELQITPGSTRDEISLDSAKKACERSETDVTTEHHQ 240
DB 181 ELGSDSSEDTVNAKATYCSVGOEELQITPGSTRDEISLDSAKKACERSETDVTTEHHQ 240
QY 241 PSNNDLNTTEKRAERHPEKIQGSSVSLAHVPCGTNTHASSLOHENSLLITKDRNVE 300
DB 241 PSNNDLNTTEKRAERHPEKIQGSSVSLAHVPCGTNTHASSLOHENSLLITKDRNVE 300
QY 241 PSNNDLNTTEKRAERHPEKIQGSSVSLAHVPCGTNTHASSLOHENSLLITKDRNVE 300
DB 241 PSNNDLNTTEKRAERHPEKIQGSSVSLAHVPCGTNTHASSLOHENSLLITKDRNVE 300

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QY 301 KAEFCNKSGOPGLARSOHNRNAGSKETCNDRRTSTEEKVDLNLADPLCEKREKMNOKLPC 360
DB 301 KAEFCNKSGOPGLARSOHNRNAGSKETCNDRRTSTEEKVDLNLADPLCEKREKMNOKLPC 360
QY 361 SENPRDTEDPWITLNSIIOKYNEMFSSDELLGSDSDHSGESSENAKAVADLVLEND 420
DB 361 SENPRDTEDPWITLNSIIOKYNEMFSSDELLGSDSDHSGESSENAKAVADLVLEND 420
QY 361 SENPRDTEDPWITLNSIIOKYNEMFSSDELLGSDSDHSGESSENAKAVADLVLEND 420
DB 361 SENPRDTEDPWITLNSIIOKYNEMFSSDELLGSDSDHSGESSENAKAVADLVLEND 420
QY 421 EYSGSSEKIDLLASDPHEALICKSERVHSKSVESNIEDIKGTQYRKKAASLPNLSHTEN 480
DB 421 EYSGSSEKIDLLASDPHEALICKSERVHSKSVESNIEDIKGTQYRKKAASLPNLSHTEN 480
QY 421 EYSGSSEKIDLLASDPHEALICKSERVHSKSVESNIEDIKGTQYRKKAASLPNLSHTEN 480
DB 421 EYSGSSEKIDLLASDPHEALICKSERVHSKSVESNIEDIKGTQYRKKAASLPNLSHTEN 480
QY 481 LITGAFVTEPQIIOERPLTNLTKRRRPTSGLHPEDFTKKADLAQVOKTPEMNOCTNTE 540
DB 481 LITGAFVTEPQIIOERPLTNLTKRRRPTSGLHPEDFTKKADLAQVOKTPEMNOCTNTE 540
QY 541 ONGQVMNITNSGHEKTKGDSIQNKNNPNPIESLEKESAFKTKAPDISISSIMLELNI 600
DB 541 ONGQVMNITNSGHEKTKGDSIQNKNNPNPIESLEKESAFKTKAPDISISSIMLELNI 600
QY 601 HNSKAPKKNRLRRKSTHIALVYSRNLSPNCTELOIDSCSSSEIKKKKNQMPV 660
DB 601 HNSKAPKKNRLRRKSTHIALVYSRNLSPNCTELOIDSCSSSEIKKKKNQMPV 660
QY 661 RHSRNLQMEGKEPATGAKSKNKPNEOTSKRHSOTPELKLITNAPGFTKCSNTSELKE 720
DB 661 RHSRNLQMEGKEPATGAKSKNKPNEOTSKRHSOTPELKLITNAPGFTKCSNTSELKE 720
QY 721 FVNPSLPREEKEEKLKTVKVSNNADPPDLMSGERVLQTERSVSSSISLVPCTDYGTO 780
DB 721 FVNPSLPREEKEEKLKTVKVSNNADPPDLMSGERVLQTERSVSSSISLVPCTDYGTO 780
QY 781 ESISLEVTGAKATEPNKCYSOCAAEENPKGLIHGCSKDRNDTBEFKPIPLGHEVNS 840
DB 781 ESISLEVTGAKATEPNKCYSOCAAEENPKGLIHGCSKDRNDTBEFKPIPLGHEVNS 840
QY 841 RETSIEMESELDQOYLQNTFKVSKROSFALPSNGNAEBECATPSAHSGLSKKOSPVYT 900
DB 841 RETSIEMESELDQOYLQNTFKVSKROSFALPSNGNAEBECATPSAHSGLSKKOSPVYT 900
QY 901 FECEQKEBNQKNESNIKPVQTVNTIAGFPVVGOKDKPVDAKCSIKGSGRCLSSQERG 960
DB 901 FECEQKEBNQKNESNIKPVQTVNTIAGFPVVGOKDKPVDAKCSIKGSGRCLSSQERG 960
QY 961 NETGILITPNKGLLONPRIPPLPIKSFVTKCKKNLLENFEHSHSPEKMGNEINP 1020
DB 961 NETGILITPNKGLLONPRIPPLPIKSFVTKCKKNLLENFEHSHSPEKMGNEINP 1020
QY 1021 STVSTISRNNTIRENFKASSNINEVGSSTNEVGSINIEGSSDENIOAELGRRGPKL 1080
DB 1021 STVSTISRNNTIRENFKASSNINEVGSSTNEVGSINIEGSSDENIOAELGRRGPKL 1080
QY 1081 NAMRLGLVLOPEVYKQSLPGSNCKHPEIKKOYEVEVOVTMTFSPYLISDNLEQPMSS 1140
DB 1081 NAMRLGLVLOPEVYKQSLPGSNCKHPEIKKOYEVEVOVTMTFSPYLISDNLEQPMSS 1140
QY 1141 HASQVCESTPPDLLDDGEIKEDTFAENDIKESSAVFESKVOGKGLSRSPSPFTTHLAQ 1200
DB 1141 HASQVCESTPPDLLDDGEIKEDTFAENDIKESSAVFESKVOGKGLSRSPSPFTTHLAQ 1200
QY 1201 GYRGAKKLSESEENLSEDEELPCFOLLHKGKVNINISQSTRHSTVATECLSKTTEENL 1260
DB 1201 GYRGAKKLSESEENLSEDEELPCFOLLHKGKVNINISQSTRHSTVATECLSKTTEENL 1260
QY 1261 LSLKNSLNDCSNOVILAKASQEHLSSETKCSASLFSQCELEEDLTANTNTQDFPLIGS 1320
DB 1261 LSLKNSLNDCSNOVILAKASQEHLSSETKCSASLFSQCELEEDLTANTNTQDFPLIGS 1320
QY 1321 SKQMRHOSQGVGSLDKELVSDDEERGTGLEENNOEQSDNSNIGEAASCESETSYSE 1380
DB 1321 SKQMRHOSQGVGSLDKELVSDDEERGTGLEENNOEQSDNSNIGEAASCESETSYSE 1380
QY 1381 DCSGLSSQSDILITTOQRTQWNLKIQEAMALEAVLEQSGQPSNYSPTLISDSALE 1440
DB 1381 DCSGLSSQSDILITTOQRTQWNLKIQEAMALEAVLEQSGQPSNYSPTLISDSALE 1440

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Db      1381 DCSGSSOSDILITTOORDTMOHLITLOQEMAELEVLLEHGSGQPSNSYPSIISDSCALE 1440
Qy      1441 DLRNPEQOSTSEKAVLITLQKSSSEPIQONPEGLSADAFEVSAOSTSKNKPGEVRSRSPK 1500
Db      1441 DLRNPEQOSTSEKAVLITLQKSSSEPIQONPEGLSADAFEVSAOSTSKNKPGEVRSRSPK 1500
Qy      1501 CPSLDRWYMHSCSGSIQNRNYPQSOBELIKVYDVEEQOLESGPHDLTETSYLPRODLG 1560
Db      1501 CPSLDRWYMHSCSGSIQNRNYPQSOBELIKVYDVEEQOLESGPHDLTETSYLPRODLG 1560
Qy      1561 TPYLSGISTLSFSDDESDPSSEDRAPASAVGNIPSTSAKYVQLKVAESAQSPAHAHT 1620
Db      1561 TPYLSGISTLSFSDDESDPSSEDRAPASAVGNIPSTSAKYVQLKVAESAQSPAHAHT 1620
Qy      1621 DTAGYNAMESYREKPELTASTERYNKRMSMVVSGLTPEEPFLYKFKARKHITLTNL 1680
Db      1621 DTAGYNAMESYREKPELTASTERYNKRMSMVVSGLTPEEPFLYKFKARKHITLTNL 1680
Qy      1681 TEETHHVWKTDAEFVCERTLKYFLGAGKRWVSYFWYTQSIKERKMLNEHDFEVRGDY 1740
Db      1681 TEETHHVWKTDAEFVCERTLKYFLGAGKRWVSYFWYTQSIKERKMLNEHDFEVRGDY 1740
Qy      1741 VNGRHHQGRKARERODRKIFRGLCCYGPFTNMPTDOLQEMVQLCGASVYKELSSFTL 1800
Db      1741 VNGRHHQGRKARERODRKIFRGLCCYGPFTNMPTDOLQEMVQLCGASVYKELSSFTL 1800
Qy      1801 GTGVPIVYVOPDANTEDNGFHAIGOMCEAPVYTRFVMDVSLYXCOEIDTFLIQTIP 1860
Db      1801 GTGVPIVYVOPDANTEDNGFHAIGOMCEAPVYTRFVMDVSLYXCOEIDTFLIQTIP 1860
Qy      1861 SHY 1863
Db      1861 SHY 1863

RESULT 12
PCT-US95-10220-2
Sequence 2, Application PC/TUS9510220
GENERAL INFORMATION:
APPLICANT: Skolnick, Mark H.
APPLICANT: Goldgar, David E.
APPLICANT: Miki, Yoshio
APPLICANT: Swenson, Jeff
APPLICANT: Kamb, Alexander
APPLICANT: Harshman, Keith D.
APPLICANT: Shattuck-Eidens, Donna M.
APPLICANT: Tavligian, Sean V.
APPLICANT: Wiseman, Roger W.
APPLICANT: Futreal, P. Andrew
TITLE OF INVENTION: Method for Diagnosing a
TITLE OF INVENTION: Predisposition for Breast and Ovarian Cancer
NUMBER OF SEQUENCES: 85
CORRESPONDENCE ADDRESS:
ADDRESS: Venable, Baetjer, Howard & Civiletti, LLP
STREET: 1201 New York Avenue, N.W., Suite 1000
CITY: Washington
STATE: DC
COUNTRY: USA
ZIP: 20005
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US95/10220
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US
FILING DATE: 07-JUN-1995
PRIOR APPLICATION DATA:

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? APPLICATION NUMBER: US 08/409,305
? FILING DATE: 24-MAR-1995
? PRIOR APPLICATION DATA:
? APPLICATION NUMBER: US 08/348,824
? FILING DATE: 29-NOV-1994
? PRIOR APPLICATION DATA:
? APPLICATION NUMBER: US 08-308,104
? FILING DATE: 16-SEP-1994
? PRIOR APPLICATION DATA:
? APPLICATION NUMBER: US 08/300,266
? FILING DATE: 02-SEP-1994
? PRIOR APPLICATION DATA:
? APPLICATION NUMBER: US 08/289,221
? FILING DATE: 12-AUG-1994
? ATTORNEY/AGENT INFORMATION:
? NAME: Ihnen, Jeffrey L.
? REGISTRATION NUMBER: 28,957
? REFERENCE/DOCKET NUMBER: 24884-109347
? TELECOMMUNICATION INFORMATION:
? TELEPHONE: 202-962-8300
? TELEFAX: 202-962-4810
? INFORMATION FOR SEQ ID NO: 2:
? SEQUENCE CHARACTERISTICS:
? LENGTH: 1863 amino acids
? TYPE: amino acid
? TOPOLOGY: linear
? MOLECULE TYPE: protein
? PCT-US95-10220-2

Query Match          99.9%; Score 9642; DB 5; Length 1863;
Best Local Similarity 99.9%; Pred. No. 0;
Matches 1862; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy      1 MDSALRYEVQNVINAMOKITLCPICLILKEPVSTKCDHIFCKFCMLKILNKKGPSQ 60
Db      1 MDSALRYEVQNVINAMOKITLCPICLILKEPVSTKCDHIFCKFCMLKILNKKGPSQ 60
Qy      61 CPLCKNDITKRSLOESTRFSQVLEBLKIIICAFOLDTGLEVANSYNFAKKENNSPEHLKD 120
Db      61 CPLCKNDITKRSLOESTRFSQVLEBLKIIICAFOLDTGLEVANSYNFAKKENNSPEHLKD 120
Qy      121 EVSIISQKGYRRNARKLQSEPNLSLOETISLVQSLNMGVYRLTKRQRIQPKQTSYI 180
Db      121 EVSIISQKGYRRNARKLQSEPNLSLOETISLVQSLNMGVYRLTKRQRIQPKQTSYI 180
Qy      181 ELGSDSEPTVKKATYCSVGOELQITPOGRDEISLDSAKKACEPSETDYNTTEHHQ 240
Db      181 ELGSDSEPTVKKATYCSVGOELQITPOGRDEISLDSAKKACEPSETDYNTTEHHQ 240
Qy      241 PSNNDLNTTEKRAERHPEKXYOGSSVNLHVEPCGTNTASSLOHENSLLITKDRNVE 300
Db      241 PSNNDLNTTEKRAERHPEKXYOGSSVNLHVEPCGTNTASSLOHENSLLITKDRNVE 300
Qy      301 KAEPCNKSKOPGLASOHNRNAGSKETONDRRTPTTEKKYVNLNDPLCERENKOKLPC 360
Db      301 KAEPCNKSKOPGLASOHNRNAGSKETONDRRTPTTEKKYVNLNDPLCERENKOKLPC 360
Qy      361 SENPRDTEVPWITLNSIIOKYNEMFSSDELLSDSDSHDESESNKAVADVLVDLNEVD 420
Db      361 SENPRDTEVPWITLNSIIOKYNEMFSSDELLSDSDSHDESESNKAVADVLVDLNEVD 420
Qy      421 EYSGSSEKIDLLASDPHALICKSERVHKSVEESNIEDKIFGKYRRKASLIPNLSHVTEN 480
Db      421 EYSGSSEKIDLLASDPHALICKSERVHKSVEESNIEDKIFGKYRRKASLIPNLSHVTEN 480
Qy      481 LITGAFVTEPQIQRPLTNLTKRRRPTSGLHEDPILKADLAVOQTPKINQGTQTE 540
Db      481 LITGAFVTEPQIQRPLTNLTKRRRPTSGLHEDPILKADLAVOQTPKINQGTQTE 540
Qy      541 ONGOVANITNSGHEKTKGDSIONKKNPILSELEKESAPFKTAPELSSISNNLELNT 600
Db      541 ONGOVANITNSGHEKTKGDSIONKKNPILSELEKESAPFKTAPELSSISNNLELNT 600

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[illegible]

Db	1661	TEETHVVMKDAEVCERTLKTYFLGLAGKMWVSIFMWYQSIKERKMLNEHDEVRGADV	1740
QY	1741	VNGNRHOGPKTARESODRKIFRGLEICCYGPFNTNPTDOLEMWVOLGASVYKLSFTL	1800
Db	1741	VNGNRHOGPKTARESODRKIFRGLEICCYGPFNTNPTDOLEMWVOLGASVYKLSFTL	1800
QY	1801	GTGVHPPIVWVOPDAMTEDNGFHAIGOMCEAPVYVREWLDSVALYOCOEIDPTYLIPIPH	1860
Db	1801	GTGVHPPIVWVOPDAMTEDNGFHAIGOMCEAPVYVREWLDSVALYOCOEIDPTYLIPIPH	1860
QY	1861	SHY 1863	
Db	1861	SHY 1863	

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      RESULT 13
      US-08-598-591-2
      ; Sequence 2, Application US/08598591
      ; Patent No. 5654155
      ; GENERAL INFORMATION:
      ; APPLICANT: Allen, Antonette C.
      ; APPLICANT: Alvarez, Christopher P.
      ; APPLICANT: Critz, Brenda S.
      ; APPLICANT: Murphy, Patricia D.
      ; APPLICANT: Olson, Sheri J.
      ; APPLICANT: Schelter, Denise B.
      ; APPLICANT: Zeng, Bin
      ; TITLE OF INVENTION: A Consensus Sequence of the Human BRCA1 Gene
      ; Patent No. 5654155
      ; NUMBER OF SEQUENCES: 74
      ; CORRESPONDENCE ADDRESS:
      ; ADDRESSEE: BURNS, DOANE, SWECKER & MATHIS
      ; STREET: 699 Prince St.
      ; CITY: Alexandria
      ; STATE: VA
      ; COUNTRY: USA
      ; ZIP: 22314
      ; COMPUTER READABLE FORM:
      ; MEDIUM TYPE: Floppy disk
      ; COMPUTER: IBM PC compatible
      ; OPERATING SYSTEM: PC-DOS/MS-DOS
      ; SOFTWARE: PatentIn Release #1.0, Version #1.30
      ; CURRENT APPLICATION DATA:
      ; APPLICATION NUMBER: US/08/598,591
      ; FILING DATE: herewith
      ; CLASSIFICATION: 435
      ; ATTORNEY/AGENT INFORMATION:
      ; NAME: Swecker, Robert S.
      ; REGISTRATION NUMBER: 19,885
      ; REFERENCE/DOCKET NUMBER: 020160-282
      ; TELECOMMUNICATION INFORMATION:
      ; TELEPHONE: 703-836-6620
      ; TELEFAX: 703-836-2021
      ; INFORMATION FOR SEQ ID NO: 2:
      ; SEQUENCE CHARACTERISTICS:
      ; LENGTH: 1863 amino acids
      ; TYPE: amino acid
      ; STRANDEDNESS: not relevant
      ; TOPOLOGY: not relevant
      ; MOLECULE TYPE: protein
      ; ORIGINAL SOURCE:
      ; ORGANISM: Homo sapiens
      ; STRAIN: BRCA1
      ; POSITION IN GENOME:
      ; CHROMOSOME/SEGMENT: 17
      ; MAP POSITION: 17q21
      ; US-08-598-591-2

      Query Match          99.9%; Score 9635; DB 1; Length 1863;
      Best Local Similarity 99.8%; Pred. No. 0;
      Matches 1860; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

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QY 1 MDLSALRVEEYQVNIAMOKILECPICLLEIKEPVSTKCDHIFCECKMLKTLNOKGSPQ 60
 Db 1 MDLSALRVEEYQVNIAMOKILECPICLLEIKEPVSTKCDHIFCECKMLKTLNOKGSPQ 60
 QY 61 CPLCKNDITKRSLOESTREFSOLVBEELLKICAFOLDTGLEVANSINPAKKENNSPEHLKD 120
 Db 61 CPLCKNDITKRSLOESTREFSOLVBEELLKICAFOLDTGLEVANSINPAKKENNSPEHLKD 120
 QY 121 EVSIIOSMGYNRAKRLIQSEPNESLOETSLVOLSMLGVTYRTKQRIORPOKTSYI 180
 Db 121 EVSIIOSMGYNRAKRLIQSEPNESLOETSLVOLSMLGVTYRTKQRIORPOKTSYI 180
 QY 181 ELGSDSSEDIYNNKATYCSVGOEQLQITPOGTDEISLDSAKKAACEFSEIDVTNTEHQ 240
 Db 181 ELGSDSSEDIYNNKATYCSVGOEQLQITPOGTDEISLDSAKKAACEFSEIDVTNTEHQ 240
 QY 241 PSNNDLNTTEKRAERHEPEKTOGSSVSNLHVEPGCTNHASLSQHESSLLTKRMANE 300
 Db 241 PSNNDLNTTEKRAERHEPEKTOGSSVSNLHVEPGCTNHASLSQHESSLLTKRMANE 300
 QY 301 KAEPCKNSKOPGLARSOHNRWAGSKETCNDRTPESTERKVDLNLADPLCEKEMNKOKLPC 360
 Db 301 KAEPCKNSKOPGLARSOHNRWAGSKETCNDRTPESTERKVDLNLADPLCEKEMNKOKLPC 360
 QY 361 SENRDTEDVPIWTLNSSIOKVNEWFSDELLGSDSDHGESESNAAVADYLDVLEND 420
 Db 361 SENRDTEDVPIWTLNSSIOKVNEWFSDELLGSDSDHGESESNAAVADYLDVLEND 420
 QY 421 EYSSSEKIDLLADDPHEALICKSERVHASKVESNIEBKIFGKTYRKKASLPNLSHTEN 480
 Db 421 EYSSSEKIDLLADDPHEALICKSERVHASKVESNIEBKIFGKTYRKKASLPNLSHTEN 480
 QY 481 LIIGAVTEPOIIQERPLTNLKKRRRPTSGLHPEDTIKADLAVOKTPEMINOCTOTE 540
 Db 481 LIIGAVTEPOIIQERPLTNLKKRRRPTSGLHPEDTIKADLAVOKTPEMINOCTOTE 540
 QY 541 ONGOVNMTNSGHNKTKGDSIONEKNPNPIESLEKEAFTKAPFISSISNMLEINI 600
 Db 541 ONGOVNMTNSGHNKTKGDSIONEKNPNPIESLEKEAFTKAPFISSISNMLEINI 600
 QY 601 HNSKAPKNRLRRKSTRHIALELVYSRNLSPPCTELQIDSCSSSEIKKKKKKNQMPV 660
 Db 601 HNSKAPKNRLRRKSTRHIALELVYSRNLSPPCTELQIDSCSSSEIKKKKKKNQMPV 660
 QY 661 RSHNNLOLMEGKEPATGAKKSNKPNEDQTSKRHDSTPELKLITNAPGFSTCSNTSELKE 720
 Db 661 RSHNNLOLMEGKEPATGAKKSNKPNEDQTSKRHDSTPELKLITNAPGFSTCSNTSELKE 720
 QY 721 FVNPSLPREKEELETYKVSNNADDPKDLMSGERVQLQTERSVSSSISLVPGTGYTO 780
 Db 721 FVNPSLPREKEELETYKVSNNADDPKDLMSGERVQLQTERSVSSSISLVPGTGYTO 780
 QY 781 ESISLLEVSTLGAKATEPNKCVSOCAAFENPKGLIHGSKDNNDTEGFKYPLGHEVNS 840
 Db 781 ESISLLEVSTLGAKATEPNKCVSOCAAFENPKGLIHGSKDNNDTEGFKYPLGHEVNS 840
 QY 841 RETSIEMEESLDOYIQTNTFKVSKROSFALFSPNGNAEECAFTSAHSGSLKOKSPKYT 900
 Db 841 RETSIEMEESLDOYIQTNTFKVSKROSFALFSPNGNAEECAFTSAHSGSLKOKSPKYT 900
 QY 901 FECEBOKREENOGKNSNIKPVQTVNITAGFPVVGOKDKRVDNAKSIKGSREFCSSOPRG 960
 Db 901 FECEBOKREENOGKNSNIKPVQTVNITAGFPVVGOKDKRVDNAKSIKGSREFCSSOPRG 960
 QY 961 NETGLITPNKHLQNPYRIPLRPIKSVFTKCKNLEENFEHSHMSPREMGNEINP 1020
 Db 961 NETGLITPNKHLQNPYRIPLRPIKSVFTKCKNLEENFEHSHMSPREMGNEINP 1020
 QY 1021 STVSTISRRNIRENVFEKASSNINEVGSSTNEVGSSTNEIGSSDENITQAEELGRNGPKL 1080
 Db 1021 STVSTISRRNIRENVFEKASSNINEVGSSTNEVGSSTNEIGSSDENITQAEELGRNGPKL 1080
 QY 1081 NAMLRGLVLOPEVYKQSLPGSNCKHPEIKOEVEEVQVNTDPSPLYISDNLEQPMGSS 1140

Db 1081 NAMLRGLVLOPEVYKQSLPGSNCKHPEIKOEVEEVQVNTDPSPLYISDNLEQPMGSS 1140
 QY 1141 HASOVCSTPDDLLDDGEIKEDTSPAENDIKESSAVSKSVOKELSRSPFTTHLQ 1200
 Db 1141 HASOVCSTPDDLLDDGEIKEDTSPAENDIKESSAVSKSVOKELSRSPFTTHLQ 1200
 QY 1201 GYRGAKKLSESEENLSEDEELPCOHLLEKGNVNNIPSOSTRSTVATCLSKNTEENL 1260
 Db 1201 GYRGAKKLSESEENLSEDEELPCOHLLEKGNVNNIPSOSTRSTVATCLSKNTEENL 1260
 QY 1261 LSLKNSLDCSNQVILAKASOEHLSEETKCSASLFSQCSLEDLTANTNTODPELGS 1320
 Db 1261 LSLKNSLDCSNQVILAKASOEHLSEETKCSASLFSQCSLEDLTANTNTODPELGS 1320
 QY 1321 SKOMRHOSESOGVGLSDKELYSDDEERGTGLENNNOBOSMDSMLGAAGCESSTVSE 1380
 Db 1321 SKOMRHOSESOGVGLSDKELYSDDEERGTGLENNNOBOSMDSMLGAAGCESSTVSE 1380
 QY 1381 DCSGLSQSDILITQOQRTMOHNLKLOEWAELAVLEQHGSPNSYPSIISDSSALE 1440
 Db 1381 DCSGLSQSDILITQOQRTMOHNLKLOEWAELAVLEQHGSPNSYPSIISDSSALE 1440
 QY 1441 DLNPEOSTSEKAVLTSQKSSEYPISONPEGLSADKFEVSAADSTSKNKEPVERSSPK 1500
 Db 1441 DLNPEOSTSEKAVLTSQKSSEYPISONPEGLSADKFEVSAADSTSKNKEPVERSSPK 1500
 QY 1501 CPSLDDRMVHMSCGSLONRNPPOEELIKVVDVEEQULEESGPHDLTETSYLPRODLRG 1560
 Db 1501 CPSLDDRMVHMSCGSLONRNPPOEELIKVVDVEEQULEESGPHDLTETSYLPRODLRG 1560
 QY 1561 TPYLESGISLFDPESDPESDRAPEBESARVGNIPSSSAKVPOLKAAESAOCPAAHHT 1620
 Db 1561 TPYLESGISLFDPESDPESDRAPEBESARVGNIPSSSAKVPOLKAAESAOCPAAHHT 1620
 QY 1621 DTAGYNAMEESVREKPELTASTERVNRKSMVYSGLTPPEPMVYFAKHHTITLNL 1680
 Db 1621 DTAGYNAMEESVREKPELTASTERVNRKSMVYSGLTPPEPMVYFAKHHTITLNL 1680
 QY 1681 TEETTHVMAKTDAFVCEERTLYPLGIAGKRVVSYFWYOSIKERKMLNEHPEYRGDV 1740
 Db 1681 TEETTHVMAKTDAFVCEERTLYPLGIAGKRVVSYFWYOSIKERKMLNEHPEYRGDV 1740
 QY 1741 VNGRNHOGPKRARSODRKIFRGLEICCYGFTMPIDOLEMVOVLGASVARELSFTL 1800
 Db 1741 VNGRNHOGPKRARSODRKIFRGLEICCYGFTMPIDOLEMVOVLGASVARELSFTL 1800
 QY 1801 GTGYHPIYVVOPTDAMTEBNGFHAIGOMCEAPVYTRVAVLDSVALYOCQELDTYLIPOIP 1860
 Db 1801 GTGYHPIYVVOPTDAMTEBNGFHAIGOMCEAPVYTRVAVLDSVALYOCQELDTYLIPOIP 1860
 QY 1861 SHY 1863
 Db 1861 SHY 1863

RESULT 14
 US-08-798-691-2
 : Sequence 2, Application US/08798691
 : Patent No. 5750400
 : GENERAL INFORMATION:
 : APPLICANT: Murphy, Patricia D.
 : APPLICANT: Allen, Antonette C.
 : APPLICANT: Alvaras, Christopher P.
 : APPLICANT: Critz, Brenda S.
 : APPLICANT: Olson, Sheri J.
 : APPLICANT: Schelter, Denise B.
 : APPLICANT: Zeng, Bin
 : TITLE OF INVENTION: Coding Sequences of the Human
 : TITLE OF INVENTION: BRCA1 Gene
 : NUMBER OF SEQUENCES: 72
 : CORRESPONDENCE ADDRESS:
 : ADDRESSEE: ONCORMED

STREET: 200 Perry Parkway
City: Gailthersberg
STATE: MD
COUNTRY: USA
ZIP: 20877
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/798,691
FILING DATE: 12-Feb-97
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Thomas Galligos
REGISTRATION NUMBER: 32,692
REFERENCE/DOCKET NUMBER: PA-0054CJP
TELECOMMUNICATION INFORMATION:
TELEPHONE: 301-527-2051
TELEFAX: 301-208-6997
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 1863 amino acids
TYPE: amino acid
STRANDEDNESS: not relevant
TOPOLOGY: not relevant
MOLECULE TYPE: protein
ORIGINAL SOURCE:
ORGANISM: Homo sapiens
STRAIN: BRCA1
POSITION IN GENOME:
CHROMOSOME/SEGMENT: 17
MAP POSITION: 17q21
US-08-798-691-2

Query Match 99.9%; Score 9635; DB 1; Length 1863;
Best local Similarity 99.8%; Pred. No. 0;
Matches 1860; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 1 MDLSALRVEEYONVINAMOKIIECPICLELIKEPVSTKCDHIEFCFCKMLKLNOKKPSQ 60
DB 1 MDLSALRVEEYONVINAMOKIIECPICLELIKEPVSTKCDHIEFCFCKMLKLNOKKPSQ 60
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DB 61 CPLKNDITKRSLOSTRSOLVVEELKLTICAFOLDTGLTYANSTNPAKKENNSPEHLKD 120
QY 121 EVSIIQSMGYRRARRKLLQSEPEPNSLOETSLSYOLSNLGVTRLRTKORIQPQKTSYTI 180
DB 121 EVSIIQSMGYRRARRKLLQSEPEPNSLOETSLSYOLSNLGVTRLRTKORIQPQKTSYTI 180
QY 181 ELGSDSSEDTVNKATYCSVGDELQITPQGTREDEISLDSAKKACESETDVTNTEHHQ 240
DB 181 ELGSDSSEDTVNKATYCSVGDELQITPQGTREDEISLDSAKKACESETDVTNTEHHQ 240
QY 241 PSNNLNTTERKAARHPEKRYGSSVSNLHVEPCCTNHASSLOHENSLLTKRMANVE 300
DB 241 PSNNLNTTERKAARHPEKRYGSSVSNLHVEPCCTNHASSLOHENSLLTKRMANVE 300
QY 301 KAFPCNKSKOPGLAISOHNRRMAGSKETCNDRTPTSTEKKVDLNAADPLCEKREKMNOKLPC 360
DB 301 KAFPCNKSKOPGLAISOHNRRMAGSKETCNDRTPTSTEKKVDLNAADPLCEKREKMNOKLPC 360
QY 361 SENPDEDEDVPIITLNNSTIOKYNEMFNSDELGSDSDHGESNAKAVADVLNVEYD 420
DB 361 SENPDEDEDVPIITLNNSTIOKYNEMFNSDELGSDSDHGESNAKAVADVLNVEYD 420
QY 421 EYSGSSEKIDILASPHALICKSRVHSKSVESNIEKIFGKTYRKASLPNLSHYVEN 480
DB 421 EYSGSSEKIDILASPHALICKSRVHSKSVESNIEKIFGKTYRKASLPNLSHYVEN 480
QY 481 LITGAFVTEPQIIOERPLTNKLKRRRPTSGLHPDEFIKKADLAVQKTPEMINQSTNGTE 540

DB 481 LITGAFVTEPQIIOERPLTNKLKRRRPTSGLHPDEFIKKADLAVQKTPEMINQSTNGTE 540
QY 541 QNGOVYNNITNSGHEKNTKGDSTIONENKPNPISLEKESAFKTAEPISSTINMELELNI 600
DB 541 QNGOVYNNITNSGHEKNTKGDSTIONENKPNPISLEKESAFKTAEPISSTINMELELNI 600
QY 601 HNSKAPKKRLRKRSSTRIHLELVSNLSPPNCTELOIDSCSSSEETKKKKNOMVY 660
DB 601 HNSKAPKKRLRKRSSTRIHLELVSNLSPPNCTELOIDSCSSSEETKKKKNOMVY 660
QY 661 HHSRNLOMEGKEPATGAKSNKPNEQTSKRSDSTFPPELKLTLNAPGSKTSNTSELKE 720
DB 661 HHSRNLOMEGKEPATGAKSNKPNEQTSKRSDSTFPPELKLTLNAPGSKTSNTSELKE 720
QY 721 FVNPSPLEPEKEKLETYKVSNNADPKDMLSGERVLOTERSVSSSTISLVPGTDYGTQ 780
DB 721 FVNPSPLEPEKEKLETYKVSNNADPKDMLSGERVLOTERSVSSSTISLVPGTDYGTQ 780
QY 781 ESISLLEVSTLGAKEPKNKCVSOCAAFENPGLIHGSKDNRNDEGKTYLGEHVNS 840
DB 781 ESISLLEVSTLGAKEPKNKCVSOCAAFENPGLIHGSKDNRNDEGKTYLGEHVNS 840
QY 841 RETSIEMESELDAYLQNTFFKYSKROSEFALFNSPNAEDECATFSAHSGSLKQSPKYT 900
DB 841 RETSIEMESELDAYLQNTFFKYSKROSEFALFNSPNAEDECATFSAHSGSLKQSPKYT 900
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DB 901 FECEQKEENOGKNESNIKPVQTVNITAGFPVYGQDKDPVNAKCSIKGSRCLCSQFNG 960
QY 961 NETGLITPKHGLLQNPYRIPPLPKSVKTKCKNLEENPEEHSMSPEEMENGENTP 1020
DB 961 NETGLITPKHGLLQNPYRIPPLPKSVKTKCKNLEENPEEHSMSPEEMENGENTP 1020
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DB 1021 STVSTISRNNINRENYFEKASSNINEVSGSTNEVSSINELISSDENIOAELGRNGPPL 1080
QY 1081 NAMLRGLVLOPEVYQSLPGSNCKHPEIKOEYEEVQVNTDFSPYLLISDMLBOPMGSS 1140
DB 1081 NAMLRGLVLOPEVYQSLPGSNCKHPEIKOEYEEVQVNTDFSPYLLISDMLBOPMGSS 1140
QY 1141 HASQVCSERPDLDDGELKEDTSFAENDIKSSAVFSKSVQKGLSRSRSPFTTHLQ 1200
DB 1141 HASQVCSERPDLDDGELKEDTSFAENDIKSSAVFSKSVQKGLSRSRSPFTTHLQ 1200
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DB 1201 GYRRGAKKLESSEENLSEDEELPCFOHLLFGKVNNTIPSOJTRHSTVATECSKNTENYL 1260
QY 1261 ISLKNSLNDCSNOVILAKASOEHLSEETKCSASFSSQCSLELDTANTNTQDPFLIGS 1320
DB 1261 ISLKNSLNDCSNOVILAKASOEHLSEETKCSASFSSQCSLELDTANTNTQDPFLIGS 1320
QY 1321 SKOMRHQESQGVGSDKELYSDDERGGLLENNQOEBSMNSNGEASGCESETSVSE 1380
DB 1321 SKOMRHQESQGVGSDKELYSDDERGGLLENNQOEBSMNSNGEASGCESETSVSE 1380
QY 1381 DCSGLSOSDILITTOORDTMOHNLTKLOENAELEAVLEOHGSOQPSNSYPSITISDSALE 1440
DB 1381 DCSGLSOSDILITTOORDTMOHNLTKLOENAELEAVLEOHGSOQPSNSYPSITISDSALE 1440
QY 1441 DLRNPEOSTSEKAVITLQSKSSSEYPLISQNPBGISLAKFEVSADSSSTSKNPEGVERSSPSK 1500
DB 1441 DLRNPEOSTSEKAVITLQSKSSSEYPLISQNPBGISLAKFEVSADSSSTSKNPEGVERSSPSK 1500
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DB 1501 CPSLDDRMVHMSGCSGLQNRNPPSOEELIKYVDVEOOLDESGPHDLTFETSLPQODLEG 1560
QY 1561 TPYLESGISLPSDDESPSEDRAPESARVGNIPSTSAALKVPQLKVAESAQSPAATTT 1620

Db 1561 TPYESGISLSPDESDPSEDRAPEASRVGNIPSTSLAKVPOLKVAESAGPAAAHHT 1620
 QY 1621 DTAGYNAMESVSREKPELTASTERYNKRMSVYSGLPPEEPFLVYKFAKHHITLNTLI 1680
 Db 1621 DTAGYNAMESVSREKPELTASTERYNKRMSVYSGLPPEEPFLVYKFAKHHITLNTLI 1680
 QY 1681 TEFTTHVVMKTDAEFVCEKTLKYFLGIAGKVVVSYFWVTQSIKERRKMLNEHDFEVRGDV 1740
 Db 1681 TEFTTHVVMKTDAEFVCEKTLKYFLGIAGKVVVSYFWVTQSIKERRKMLNEHDFEVRGDV 1740
 QY 1741 VNGNRHOGPKRARESDOKRIFRGLEICCYGPTNPTDOLMMVOLLGASVYKELSSFTL 1800
 Db 1741 VNGNRHOGPKRARESDOKRIFRGLEICCYGPTNPTDOLMMVOLLGASVYKELSSFTL 1800
 QY 1801 GTGVHPIVYVOPDAMTEDENGFHAIGOMCEAPVYTRFVWLDVSYALYQCELDYLLIPQIPH 1860
 Db 1801 GTGVHPIVYVOPDAMTEDENGFHAIGOMCEAPVYTRFVWLDVSYALYQCELDYLLIPQIPH 1860
 QY 1861 SHY 1863
 Db 1861 SHY 1863

RESULT 15
 US-08-798-691-6
 ; Sequence 6, Application US/08798691
 ; Patent No. 5750400
 ; GENERAL INFORMATION:
 ; APPLICANT: Murphy, Patricia D.
 ; APPLICANT: Allen, Antonette C.
 ; APPLICANT: Alvarez, Christopher P.
 ; APPLICANT: Crite, Brenda S.
 ; APPLICANT: Olson, Sheri J.
 ; APPLICANT: Schelter, Denise B.
 ; APPLICANT: Zeng, Bin
 ; TITLE OF INVENTION: Coding Sequences of the Human
 ; TITLE OF INVENTION: BRCA1 Gene
 ; NUMBER OF SEQUENCES: 72
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: ONCOMED
 ; STREET: 200 Perry Parkway
 ; CITY: Gaithersburg
 ; STATE: MD
 ; COUNTRY: USA
 ; ZIP: 20877
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: PatentIn Release #1.0, Version #1.30
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/798,691
 ; FILING DATE: 12-Feb-97
 ; CLASSIFICATION: 435
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Thomas Gallegos
 ; REGISTRATION NUMBER: 32,692
 ; REFERENCE/DOCKET NUMBER: PA-0054CIP
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: 301-527-2051
 ; TELEFAX: 301-208-6997
 ; INFORMATION FOR SEQ ID NO: 6:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 1863 amino acids
 ; TYPE: amino acid
 ; STRANDEDNESS: not relevant
 ; TOPOLOGY: not relevant
 ; MOLECULE TYPE: protein
 ; ORIGINAL SOURCE:
 ; ORGANISM: Homo sapiens
 ; STRAIN: BRCA1
 ; POSITION IN GENOME:
 ; CHROMOSOME/SEGMENT: 17

MAP POSITION: 17q21
 US-08-798-691-6
 Query Match 99.9%; Score 9635; DB 1; Length 1863;
 Best Local Similarity 99.8%; Pred. No. 0;
 Matches 1860; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
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 1 MDLSALRYEYQVYINAMQKILCEPICLELKEKRVSTKCDHIFCFKMLLNQKQPSQ 60
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 61 CPLKNDITKRSLSDESTFVSOLVBEELKITAFOLDIGLEVANSYNAKKEKNSPELKD 120
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 121 EYSIIQSGYRNRARLLQSEPEPNSLOETLSVQLSLGTVRLFTKRIORLOPKTSVYI 180
 181 ELGSDSSEDTYVNAKATYCSVGDOELLQITPGOTRDEISLSAKKACERSETDYNTNEHQ 240
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 301 KAEPCKNSKOPGLARSOHNRWAGSKETCNDRRPTSTKRYDLNADPLCEKKNKKOLPC 360
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 361 SENPRDTEVPWITLNSIQRVNEFMSRDELLGSDSDSHGSESNKAVADVILVNEVD 420
 421 EYSGSSEKIDILADPHALCKSERVHSKVEENIEDKIFGKTYRKKASLPMLSHVTEK 480
 421 EYSGSSEKIDILADPHALCKSERVHSKVEENIEDKIFGKTYRKKASLPMLSHVTEK 480
 481 LIIGAFVPEOIIQERPLTNKLRKRRTSGLSHDEFTKRDADLAVQKTPPMINQNTOTE 540
 481 LIIGAFVPEOIIQERPLTNKLRKRRTSGLSHDEFTKRDADLAVQKTPPMINQNTOTE 540
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 541 QNGOVYNTNSGHEKTKIGDSIQNEKNPNIESLEKESAKFYTAEPYSSISINMELELN 600
 601 HNSKAPKKNRLRRKSTPHIALELVYSRNLSPPNCTELOIDSCSSSEETKKKKYOMPV 660
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 661 RHRNRLQMEGKEPATGAKKSNKPNEDTSKRHDSDFPELKLTNAPGSPFKCSNTSELKE 720
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 781 ESIISLEVSTLGRKTEPKNCVSOCAAFENPKGLIHCCSDNNNDDEGFYPLIGHVYNS 840
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 841 RETSIEMESEELDQYQNTFFKYSKROSPALFSPGNAEECATFSAHSGSLKKQSPKAT 900
 841 RETSIEMESEELDQYQNTFFKYSKROSPALFSPGNAEECATFSAHSGSLKKQSPKAT 900
 901 FECBQKEBNOGKNESNIKPVQVNTITAGFVYQKDKPVDNACSIKGSRFCLSSQFPG 960
 901 FECBQKEBNOGKNESNIKPVQVNTITAGFVYQKDKPVDNACSIKGSRFCLSSQFPG 960
 961 NETGLITPNKHGLQNTYRIPLPLPKISFYTKCKKNLLENEEHSMSPERKMGENTP 1020
 961 NETGLITPNKHGLQNTYRIPLPLPKISFYTKCKKNLLENEEHSMSPERKMGENTP 1020

Db 961 NETGLITPNKHGLQNPYRIPPLPFIKSFVTKCKKNLLEENFEHSMSPEREMGNENIP 1020
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Db 1081 NAMLRGLVLOPEVYKOSLPGSNCKHPETIKOEYEEVYQTVNTDFSPYLIISDNLQPMGSS 1140
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Db 1141 HASQVCSPTDLDLDDGEIKEDTSPAENDIKESSAVFSKSVQKGLSRSPSPFTHTHLAQ 1200
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Db 1261 LSLKNSLNDCSNOVILAKASOEHLSEETKCSASLFSQCSSELEDLTANTNTQDPFLIGS 1320
QY 1321 SKOMHOSQSGVGLSDKELVSDDERGTGLEENNOEQSMDSNLGEAASGCESETSVSE 1380
Db 1321 SKOMHOSQSGVGLSDKELVSDDERGTGLEENNOEQSMDSNLGEAASGCESETSVSE 1380
QY 1381 DCSGSLSDSLTTQORPTMOHNLKLOEMAEFAVLQOHGSOPSNSYPTIISDSALE 1440
Db 1381 DCSGSLSDSLTTQORPTMOHNLKLOEMAEFAVLQOHGSOPSNSYPTIISDSALE 1440
QY 1441 DLRNPEOSTSEKAVLTOSKSESEPISONPEGLSADKFEVSADSTSKNKEPVERSSPSK 1500
Db 1441 DLRNPEOSTSEKAVLTOSKSESEPISONPEGLSADKFEVSADSTSKNKEPVERSSPSK 1500
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Db 1501 CPSLDDRWYMHSCSGSLQNRNYPQOEELIKVYDVEEQLEESGPHDLTETSYLPRODLEG 1560
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Db 1561 TPYLESGLISLFSDDPESDPSSEDRAPESARVGNIPSTSAKVPOLKVAESAGPAAHTT 1620
QY 1621 DTAGYNAMEESVSRKPELTASTERYNKRMSWVSGLTPEEFMLVYKFAKKHHTLTNLI 1680
Db 1621 DTAGYNAMEESVSRKPELTASTERYNKRMSWVSGLTPEEFMLVYKFAKKHHTLTNLI 1680
QY 1681 TEETTHVVMKTDAEFVCERTLKYFLGIAGKVVSYFWVTOSIKERKMLNEHDFEVRGDV 1740
Db 1681 TEETTHVVMKTDAEFVCERTLKYFLGIAGKVVSYFWVTOSIKERKMLNEHDFEVRGDV 1740
QY 1741 VNGRHHOGPKRARESODRKIFRGLEICCYGPTNMPDQLEMMVOLCGASVYKELSSFTL 1800
Db 1741 VNGRHHOGPKRARESODRKIFRGLEICCYGPTNMPDQLEMMVOLCGASVYKELSSFTL 1800
QY 1801 GTGVHPIVVOQPDANTEEDNGFHAIGOMCEAPVYTRVWLDVALYQCOELDTYLLIQLPH 1860
Db 1801 GTGVHPIVVOQPDANTEEDNGFHAIGOMCEAPVYTRVWLDVALYQCOELDTYLLIQLPH 1860
QY 1861 SHY 1863
Db 1861 SHY 1863

Search completed: June 27, 2003, 18:24:40
Job time : 31 secs

GenCore version 5.1.6
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OM nucleic - nucleic search, using sw model

Run on: June 27, 2003, 17:30:39 ; Search time 273.42 seconds
(without alignments)
6405.633 Million cell updates/sec

Title: US-09-734-672-3

Perfect score: 5711

Sequence: 1 AGCTGCTGAGACTTCTCTG.....TCCCCACAGCCACTACTGA 5711

Scoring table: IDENTITY_NUC

Gapop 10.0 , Gapext 1.0

Searched: 441362 seqs, 15338381 residues

Total number of hits satisfying chosen parameters: 882724

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

Issued_Patents_NA:*
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3: /cgn2_6/ptodata/2/lna/6A.COMB.seq:*
4: /cgn2_6/ptodata/2/lna/6B.COMB.seq:*
5: /cgn2_6/ptodata/2/lna/PTUS.COMB.seq:*
6: /cgn2_6/ptodata/2/lna/Backfile1.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
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2	5709.4	100.0	5711	US-08-825-487A-3	Sequence 3, App11
3	5709.4	100.0	5711	US-09-074-476-5	Sequence 5, App11
4	5707.8	99.9	5711	US-08-658-322-1	Sequence 1, App11
5	5707.8	99.9	5712	US-08-603-753D-1	Sequence 1, App11
6	5707.8	99.9	5712	US-09-099-753-1	Sequence 1, App11
7	5707.8	99.9	5712	US-08-986-106-1	Sequence 1, App11
8	5707.8	99.9	5712	US-09-007-678B-47	Sequence 47, App11
9	5707.8	99.9	5914	US-08-480-784-1	Sequence 1, App11
10	5707.8	99.9	5914	US-08-483-553-1	Sequence 1, App11
11	5707.8	99.9	5914	US-08-487-002-1	Sequence 1, App11
12	5707.8	99.9	5914	US-08-483-554B-1	Sequence 1, App11
13	5707.8	99.9	5914	US-08-488-011B-1	Sequence 1, App11
14	5707.8	99.9	5914	US-08-850-727-1	Sequence 1, App11
15	5707.8	99.9	5914	PCR-US95-10202-1	Sequence 1, App11
16	5707.8	99.9	5914	PCR-US95-10203-1	Sequence 1, App11
17	5707.8	99.9	5914	PCR-US95-10203-1	Sequence 1, App11
18	5706.2	99.9	5711	US-08-425-061-4	Sequence 4, App11
19	5706.2	99.9	5711	US-08-425-061-10	Sequence 10, App11
20	5706.2	99.9	5711	US-08-825-886-4	Sequence 10, App11
21	5706.2	99.9	5711	US-08-825-886-10	Sequence 10, App11
22	5704.6	99.9	5711	US-08-798-691-5	Sequence 5, App11
23	5704.6	99.9	5711	US-08-825-487A-5	Sequence 5, App11
24	5704.6	99.9	5711	US-09-074-476-3	Sequence 3, App11
25	5703	99.9	5711	US-08-598-591-1	Sequence 1, App11
26	5703	99.9	5711	US-08-798-691-1	Sequence 1, App11
27	5703	99.9	5711	US-08-825-487A-1	Sequence 1, App11

28	5703	99.9	5711	US-09-074-476-1	Sequence 1, App11
29	5696.8	99.8	5712	US-08-425-061-12	Sequence 12, App11
30	5696.8	99.8	5712	US-08-825-886-12	Sequence 12, App11
31	5695.8	99.7	5710	US-08-425-061-6	Sequence 6, App11
32	5695.8	99.7	5710	US-08-825-886-6	Sequence 6, App11
33	5693.8	99.7	5709	US-08-425-061-2	Sequence 2, App11
34	5693.8	99.7	5709	US-08-425-061-7	Sequence 7, App11
35	5693.8	99.7	5709	US-08-425-061-8	Sequence 8, App11
36	5693.8	99.7	5709	US-08-425-061-9	Sequence 9, App11
37	5693.8	99.7	5709	US-08-825-886-2	Sequence 2, App11
38	5693.8	99.7	5709	US-08-825-886-7	Sequence 7, App11
39	5693.8	99.7	5709	US-08-825-886-8	Sequence 8, App11
40	5693.8	99.7	5709	US-08-825-886-9	Sequence 9, App11
41	5689.8	99.6	5707	US-08-425-061-11	Sequence 11, App11
42	5689.8	99.6	5707	US-08-825-886-11	Sequence 11, App11
43	5653.8	99.0	5689	US-08-425-061-3	Sequence 3, App11
44	5653.8	99.0	5689	US-08-825-886-3	Sequence 3, App11
45	5627.6	98.5	5770	US-08-425-061-5	Sequence 5, App11

ALIGNMENTS

RESULT 1
US-08-798-691-3
Sequence 3, Application US/08798691
Patent No. 5750400
GENERAL INFORMATION:
APPLICANT: Murphy, Patricia D.
APPLICANT: Allen, Antonette C.
APPLICANT: Alvares, Christopher P.
APPLICANT: Critz, Brenda S.
APPLICANT: Olson, Sheri J.
APPLICANT: Schelter, Denise B.
TITLE OF INVENTION: Coding Sequences of the Human
NUMBER OF SEQUENCES: 72
CORRESPONDENCE ADDRESS:
ADDRESSEE: ONCORMED
STREET: 200 Perry Parkway
CITY: Galtersberg
STATE: MD
COUNTRY: USA
ZIP: 20877
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/798,691
FILING DATE: 12-Feb-97
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Thomas Gallegos
REGISTRATION NUMBER: 32,692
TELECOMMUNICATION INFORMATION:
TELEPHONE: 301-527-2051
TELEFAX: 301-208-6997
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 5711 base pairs
TYPE: nucleic acid
STRANDEDNESS: not relevant
TOPOLOGY: linear
MOLECULE TYPE: cDNA
ORIGINAL SOURCE:
ORGANISM: Homo sapiens
STRAIN: BRCAL
POSITION IN GENOME:
CHROMOSOME/SEGMENT: 17

MAP POSITION: 17421
US-08-798-691-3

Query Match 100.0%; Score 5709.4; DB 1; Length 5711;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 5710; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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RESULT 2

US-08-825-487A-3
Sequence 3, Application US/08825487A

Patent No. 6048689

GENERAL INFORMATION:

APPLICANT: Murphy, Patricia D.

APPLICANT: White, Marga B.

TITLE OF INVENTION: METHODS FOR IDENTIFYING VARIATIONS IN POLYNUCLEOTIDE SEQUE

NUMBER OF SEQUENCES: 110

CORRESPONDENCE ADDRESS:

ADDRESS: Howrey & Simon

STREET: 1299 Pennsylvania Avenue., N.W.

CITY: Washington,

STATE: DC

COUNTRY: USA

ZIP: 20004

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/825,487A

FILING DATE: 28-MAR-1997

CLASSIFICATION: 435

PRIOR APPLICATION DATA:

APPLICATION NUMBER: PCT/US98/060002

FILING DATE: 26-Mar-1998

CLASSIFICATION: 435

ATTORNEY/AGENT INFORMATION:

NAME: Albert P. Halluin

REGISTRATION NUMBER: 25,227

TELECOMMUNICATION INFORMATION:

REFERENCE/DOCKET NUMBER: 05371.0012.999

INFORMATION FOR SEQ ID NO: 3:

SEQUENCE CHARACTERISTICS:

LENGTH: 5711 base pairs

TYPE: nucleic acid

STRANDEDNESS: not relevant

TOPOLOGY: linear

MOLECULE TYPE: cDNA

ORGANISM: Homo sapiens

STRAIN: BRCA1

POSITION IN GENOME:
CHROMOSOME/SEGMENT: 17
MAP POSITION: 17q21
US-08-825-487A-3

Query Match 100.0%; Score 5709.4; DB 3; Length 5711;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 5710; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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DB 601 CTGTGAGAACTGTGAGAACAAAGCGGATACACCTCAAAAGAGCGTGTCTCAATTTG 660
OY 661 AATTGGAGTCTGATTCTTCTGAAGATACCGTTAATTAAGGCAACTTATTGCACTGTGGAG 720
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DB 661 AATTGGAGTCTGATTCTTCTGAAGATACCGTTAATTAAGGCAACTTATTGCACTGTGGAG 720
OY 721 ATCAAGAAATGTGTACAAATCACCCCTCAAGGAAACAGGAGATGAATTCAGTTTGGATTCTG 780
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DB 721 ATCAAGAAATGTGTACAAATCACCCCTCAAGGAAACAGGAGATGAATTCAGTTTGGATTCTG 780
OY 781 CAAAAAGGCTGCTGTGTAATTTTCTGAGAGGAGATGAACAAATCTGAACATCAATCAAC 840
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DB 781 CAAAAAGGCTGCTGTGTAATTTTCTGAGAGGAGATGAACAAATCTGAACATCAATCAAC 840
OY 841 CCAGTAATATGATTGTAACACCACTGAGAAACGCTGACAGCTGAGAGCATCCAGAAAAGT 900
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DB 841 CCAGTAATATGATTGTAACACCACTGAGAAACGCTGACAGCTGAGAGCATCCAGAAAAGT 900
OY 901 ATCAGGAGTGTCTGTTCAAACTTGCAATGTGAGACCATGTGGCACAATAATCTCATGCCA 960
    |||||
DB 901 ATCAGGAGTGTCTGTTCAAACTTGCAATGTGAGACCATGTGGCACAATAATCTCATGCCA 960

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DB 1021 AGGCTGAATTTCTGTATAATAAAGCAACACCTTGCTTACCAAGAGACCAATACAGAT 1080
OY 1081 GGGCTGGAAGTAAAGAAACATGTATGATAGCGGACTCCAGACACAGAAAAAAGGTG 1140
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DB 1081 GGGCTGGAAGTAAAGAAACATGTATGATAGCGGACTCCAGACACAGAAAAAAGGTG 1140
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DB 5701 GCCACTACTGA 5711

RESULT 3
US-09-074-476-5
Sequence 5, Application US/09074476
Patent No. 6130322
GENERAL INFORMATION:
APPLICANT: Murphy, Patricia D.
APPLICANT: Allen, Antonette C.
APPLICANT: Alvares, Christopher P.
APPLICANT: Critz, Brenda S.
APPLICANT: Olson, Sheri J.
APPLICANT: Thirder, Denise
APPLICANT: Zeng, Bin
TITLE OF INVENTION: Coding Sequences of the Human
TITLE OF INVENTION: BRCA1 Gene
NUMBER OF SEQUENCES: 72
CORRESPONDENCE ADDRESS:
ADDRESSEE: Howrey & Simon
STREET: 1299 Pennsylvania Avenue N. W.
CITY: Washington
STATE: DC
COUNTRY: USA
ZIP: 20004
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/074,476
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/074,453
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Albert P. Halluin
REGISTRATION NUMBER: 25,227
REFERENCE/DOCKET NUMBER: 5371.34.US01
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-463-8109
TELEFAX: 650-463-8400
INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
LENGTH: 5711 base pairs

TYPE: nucleic acid
STRANDEDNESS: not relevant
TOPOLOGY: linear
MOLECULE TYPE: cDNA
ORIGINAL SOURCE:
ORGANISM: Homo sapiens
STRAIN: BRCA1 (om13)
POSITION IN GENOME:
CHROMOSOME/SEGMENT: 17
MAP POSITION: 17q21
US-09-074-476-5

Query Match 100.08; Score 5709.4; DB 3; Length 5711;
Best Local Similarity 100.08; Pred. No. 0;
Matches 5710; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 AGCTGCTGAGACTCTCTGAGACCCGACACAGGCTGTGGGTTTCTCAGATTAAGTGGCC 60
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DB 1621 AATTAAGCCTTAAGAGAGAGCTTCAATGAGGCTTCACTCTGAGATTTATCAAGAA 1680
QY 1681 CAGATTTGGCAGTTCAAAAGACTCTGAAATGATTAATGAGGAACTTAACCAACG 1740
DB 1681 CAGATTTGGCAGTTCAAAAGACTCTGAAATGATTAATGAGGAACTTAACCAACG 1740
QY 1741 AGAATGCTCAAGTATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1800
DB 1741 AGAATGCTCAAGTATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1800
QY 1801 CTATTCAGAAATGAGAAATCTTAACCAATGATGATGATGATGATGATGATGATGAT 1860
DB 1801 CTATTCAGAAATGAGAAATCTTAACCAATGATGATGATGATGATGATGATGATGAT 1860
QY 1861 AAACGAAAGCTGAACCTTAAGAGAGAGTAAAGCAATGATGATGATGATGATGAT 1920
DB 1861 AAACGAAAGCTGAACCTTAAGAGAGAGTAAAGCAATGATGATGATGATGATGAT 1920
QY 1921 ACAATTCAGAAAGCTTAAGAGAGAGTAAAGCAATGATGATGATGATGATGATGAT 1980
DB 1921 ACAATTCAGAAAGCTTAAGAGAGAGTAAAGCAATGATGATGATGATGATGATGAT 1980

Db 1921 ACAATCAAAAGACCTAAAAAGAAATAGCGTAGAGAGAGCTCTTACCAGGCAATATC 1980
QY 1981 ATGGCGTTGAACTAGTAGTAGTAGTAAGAAATCTAAGCCCACTAATGTGACTGAATGAAA 2040
Db 1981 ATGGCGTTGAACTAGTAGTAGTAGTAAGAAATCTAAGCCCACTAATGTGACTGAATGAAA 2040
QY 2041 TTGATAGTTGTTCTAGCAGTAGAGATTAAGAAAAAAGTACAAACCAATGCGACTCA 2100
Db 2041 TTGATAGTTGTTCTAGCAGTAGAGATTAAGAAAAAAGTACAAACCAATGCGACTCA 2100
QY 2101 GGCACAGCAGAAACCTACAACTCATGAGAGGTAAAGAACTGCACCTGAGCCAAAGAGA 2160
Db 2101 GGCACAGCAGAAACCTACAACTCATGAGAGGTAAAGAACTGCACCTGAGCCAAAGAGA 2160
QY 2161 GTAAACAAGCCAAATGAAACACAAAGTAAGAAAGACATGACGATCTTCCAGAGCTGA 2220
Db 2161 GTAAACAAGCCAAATGAAACACAAAGTAAGAAAGACATGACGATCTTCCAGAGCTGA 2220
QY 2221 AGTTAACAAATGACACCTGCTTTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCT 2280
Db 2221 AGTTAACAAATGACACCTGCTTTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCT 2280
QY 2281 TTGTCAATCTAGCCTTCCAAAGAAAGAAAGAAAGAAAGAAAGAAAGAAAGAAAGAAAG 2340
Db 2281 TTGTCAATCTAGCCTTCCAAAGAAAGAAAGAAAGAAAGAAAGAAAGAAAGAAAGAAAG 2340
QY 2341 CTAAATATGCTGAAGACCCCAAGATCTCATGTAAAGTGAAGAGGTTTCCAAAGCTG 2400
Db 2341 CTAAATATGCTGAAGACCCCAAGATCTCATGTAAAGTGAAGAGGTTTCCAAAGCTG 2400
QY 2401 AAAGATCTAGAGAGTAGAGTAGATTTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCT 2460
Db 2401 AAAGATCTAGAGAGTAGAGTAGATTTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCT 2460
QY 2461 AAAGATCTGTTACTGGAAGTTAGCACTTAGGGAAGGCAAAACCAAAATCAAT 2520
Db 2461 AAAGATCTGTTACTGGAAGTTAGCACTTAGGGAAGGCAAAACCAAAATCAAT 2520
QY 2521 GTGAGATCTGAGTGGAGCTTTGAAACCCCAAGGCAATTCATGTTGTTCCAAAG 2580
Db 2521 GTGAGATCTGAGTGGAGCTTTGAAACCCCAAGGCAATTCATGTTGTTCCAAAG 2580
QY 2581 ATAAATGAATGACACAGAAAGGCTTAAATATTCATTTGGGACATGAAAGTAAACACAGTC 2640
Db 2581 ATAAATGAATGACACAGAAAGGCTTAAATATTCATTTGGGACATGAAAGTAAACACAGTC 2640
QY 2641 GGGAAACAGCAGTAAGAAATGGAAGAAAGTGAAGTGAAGTGAAGTGAAGTGAAGTGAAG 2700
Db 2641 GGGAAACAGCAGTAAGAAATGGAAGAAAGTGAAGTGAAGTGAAGTGAAGTGAAGTGAAG 2700
QY 2701 TCAAGGTTTCAAAAGCGCAGTCTGTTGCTGTTTCAATTCAGGAAATGCGAAAGAGG 2760
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QY 2821 TTGAATGTGAACAAAGAAAGAAATATCAGGAAAGAAAGTGAAGTGAAGTGAAGTGAAG 2880
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QY 2881 AGACAGTTATATCAGTGCAGGCTTCTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTT 2940
Db 2881 AGACAGTTATATCAGTGCAGGCTTCTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTT 2940
QY 2941 ATGCAATGTAGTATCAAAAGAGAGGCTTAAAGTGAAGTGAAGTGAAGTGAAGTGAAG 3000
Db 2941 ATGCAATGTAGTATCAAAAGAGAGGCTTAAAGTGAAGTGAAGTGAAGTGAAGTGAAG 3000
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QY 3061 CACCACCTTTTCCCATCAAGCTATTTGTTAAACTAAATGTAAGAAAAATCTGCTAGAGG 3120
Db 3061 CACCACCTTTTCCCATCAAGCTATTTGTTAAACTAAATGTAAGAAAAATCTGCTAGAGG 3120
QY 3121 AAAACCTTTGAGAAACATTCATGATGCTGAAAGAAAGAAAGAAAGAAAGAAAGAAAG 3180
Db 3121 AAAACCTTTGAGAAACATTCATGATGCTGAAAGAAAGAAAGAAAGAAAGAAAGAAAG 3180
QY 3181 GTACAGTGACACAAATTAAGCCGTAATTAACATTAAGAAAGTGTAAAAAGCCAGCT 3240
Db 3181 GTACAGTGACACAAATTAAGCCGTAATTAACATTAAGAAAGTGTAAAAAGCCAGCT 3240
QY 3241 CAAGCAATATTAATGAAGTGAAGTTCAGTCTAATGAAGGAGGCTCCAGATTAATGAAA 3300
Db 3241 CAAGCAATATTAATGAAGTGAAGTTCAGTCTAATGAAGGAGGCTCCAGATTAATGAAA 3300
QY 3301 TAGGTTCCAGTGAATGAAGAAACATTCAGCAACATAGGTAGAAACAGAGGCCAAATTTGA 3360
Db 3301 TAGGTTCCAGTGAATGAAGAAACATTCAGCAACATAGGTAGAAACAGAGGCCAAATTTGA 3360
QY 3361 ATGCTATGCTTAAATTAAGGCTTTTGCACCTGAGGCTTAAACAAAGCTTCTGGA 3420
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QY 3421 GTAATGTAGCATCTGAAATTAAGAAAGCAAGATTAAGAAAGTGAAGTGAAGTGAAGTGA 3480
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QY 3541 ATGCTATGCTGCTTTGTTCTGAGACACCTATGACCTGTTAGATGATGATGATGATGAT 3600
Db 3541 ATGCTATGCTGCTTTGTTCTGAGACACCTATGACCTGTTAGATGATGATGATGATGAT 3600
QY 3601 AAGATCTAGTTTGGTGAAGAAATGACATTAAGAAAGTGTGCTTTTAAAGCAAGG 3660
Db 3601 AAGATCTAGTTTGGTGAAGAAATGACATTAAGAAAGTGTGCTTTTAAAGCAAGG 3660
QY 3661 TCCAGAAAGAGAGCTTGAAGAGAGTCCAGCCCTTACCCATACATATTTGGCTCAGG 3720
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QY 3781 AAGAGCTTCCCTGCTTCCAAACATTTGTTATTTGTTAAGTAAACAAATATACCTTCCAGT 3840
Db 3781 AAGAGCTTCCCTGCTTCCAAACATTTGTTATTTGTTAAGTAAACAAATATACCTTCCAGT 3840
QY 3841 CTACTAGGCAATACACCGTGTCTACGAGTGTCTGTCTAAGAAACAGAGAGAAATTTAT 3900
Db 3841 CTACTAGGCAATACACCGTGTCTACGAGTGTCTGTCTAAGAAACAGAGAGAAATTTAT 3900
QY 3901 TATCATTAAGAAATAGCTTAAATGACTGCAATACAGAGTAAATATTTGGCAAGGCAATCTC 3960
Db 3901 TATCATTAAGAAATAGCTTAAATGACTGCAATACAGAGTAAATATTTGGCAAGGCAATCTC 3960
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Db 3961 AGGAAATCACTCTTAAAGTGAAGAAACAAAGTCTGCTAGCTGTTTCTTCAAGTGA 4020
QY 4021 GTGAATTTGAAGACTGACTGCAAAATTAACAACCCAGATCTCTTCTTGAATTTGTTCTT 4080
Db 4021 GTGAATTTGAAGACTGACTGCAAAATTAACAACCCAGATCTCTTCTTGAATTTGTTCTT 4080
QY 4081 CCAAAACAAATGAGGCAATCACTGCAAAAGCAGGAGTGTCTGAGTGAAGAGAAATTTGG 4140
Db 4081 CCAAAACAAATGAGGCAATCACTGCAAAAGCAGGAGTGTCTGAGTGAAGAGAAATTTGG 4140

OY	4141	TTTTGAGATGATGAAGAAGAGAAAGGGCTTGGAAAGAAATATATCAACAGGCAAGCA	4200
Db	4141	TTTCAGATGATGAAGAAAGAGACGGCTTGGAAAGAAATATATCAAGAGCAAGCA	4200
OY	4201	TGGATTCAACTTAAAGTGAAGCAGCATCTGGGTGTGAGAGTGAAACAAGCCTCTGTGA	4260
Db	4201	TGGATTCAAACTTAAAGTGAAGCAGCATCTGGGTGTGAGAGTGAAACAAGCCTCTGTGA	4260
OY	4261	ACTGTCAGGGGCTATCCCTCAGAGTGACATTTTAAACACACAGAGGGGATACCATGC	4320
Db	4261	ACTGTCAGGGGCTATCCCTCAGAGTGACATTTTAAACACACAGAGGGGATACCATGC	4320
OY	4321	AACATTAACCTGATTAAGCTCCAGCAGAAATGCTGAACTGAAGCTGTGTAACAGC	4380
Db	4321	AACATTAACCTGATTAAGCTCCAGCAGAAATGCTGAACTGTGTAACAGC	4380
OY	4381	ATGGGAGCCACCTTCTTAACAGCTACCTTCCATCATATAAGTACTCTTCCCTTGAG	4440
Db	4381	ATGGGAGCCACCTTCTTAACAGCTACCTTCCATCATATAAGTACTCTTCCCTTGAG	4440
OY	4441	ACCTGCGAAATCCAGAAACAAGACATCAGAAAAAGCAGTATTAATCTTACAGAAAA	4500
Db	4441	ACCTGCGAAATCCAGAAACAAGACATCAGAAAAAGCAGTATTAATCTTACAGAAAA	4500
OY	4501	GTGAATACCTTATTAAGCCAGAAATCCAGAAAGCCTTCTGTGACAAAGTTTGAGTGTG	4560
Db	4501	GTGAATACCTTATTAAGCCAGAAATCCAGAAAGCCTTCTGTGACAAAGTTTGAGTGTG	4560
OY	4561	CAGATAGTTCACAGTAAATTAAGAAACAGAGGTGGAAGGCAATCCCTCTTAAT	4620
Db	4561	CAGATAGTTCACAGTAAATTAAGAAACAGAGGTGGAAGGCAATCCCTCTTAAT	4620
OY	4621	GCCCATCTTAATGATGATAGTGTGATACATGACAGTGTCTGGAGATCTTCAGAAATGA	4680
Db	4621	GCCCATCTTAATGATGATAGTGTGATACATGACAGTGTCTGGAGATCTTCAGAAATGA	4680
OY	4681	ACTTACCCTCAAGAGGAGCTCAATTAAGTGTGATGTGAGAGAGCAACAGCTGGAAG	4740
Db	4681	ACTTACCCTCAAGAGGAGCTCAATTAAGTGTGATGTGAGAGAGCAACAGCTGGAAG	4740
OY	4741	AGTCTGGGCCACACGATTTGACAGGAACATCTTACTTGGCCAAGGCAAGATCTAAGGAA	4800
Db	4741	AGTCTGGGCCACACGATTTGACAGGAACATCTTACTTGGCCAAGGCAAGATCTAAGGAA	4800
OY	4801	CCCCCTTACCTGGAACTTGGAACTCAAGCCTCTTCTGTATGACCCCTGAACTGTCTCTG	4860
Db	4801	CCCCCTTACCTGGAACTTGGAACTCAAGCCTCTTCTGTATGACCCCTGAACTGTCTCTG	4860
OY	4861	AAGACAGAGCCCCAGAGTCAAGCTGTGTGGCAACATACACTTCAACCTCTGATTTGA	4920
Db	4861	AAGACAGAGCCCCAGAGTCAAGCTGTGTGGCAACATACACTTCAACCTCTGATTTGA	4920
OY	4921	AAGTTCCCAATTAAGATTTGACAAATCTGCCCCAGAGTCCAGCTGTCTCATTACTACTG	4980
Db	4921	AAGTTCCCAATTAAGATTTGACAAATCTGCCCCAGAGTCCAGCTGTCTCATTACTACTG	4980
OY	4981	ATACTGCTGGGTATTAATGCAATGGAAGAAAGTGTGACAGAGGAAACCCAGAAATTTGAC	5040
Db	4981	ATACTGCTGGGTATTAATGCAATGGAAGAAAGTGTGACAGAGGAAACCCAGAAATTTGAC	5040
OY	5041	CTTTCACAGAAAGGGTCAACAAAAGAAATGTCCATGTGTGTGTGGCTGACCCCAAG	5100
Db	5041	CTTTCACAGAAAGGGTCAACAAAAGAAATGTCCATGTGTGTGTGGCTGACCCCAAG	5100
OY	5101	AATTTATGCTGTGTACAAAGTTTCCAGAAAACACCAATCACTTAACTTAATTA	5160
Db	5101	AATTTATGCTGTGTACAAAGTTTCCAGAAAACACCAATCACTTAACTTAATTA	5160
OY	5161	CTGAAGAGACTACTCATGTGTGTATGAAGACAGATGCTGAGTTGTGTGTGAACGGACAC	5220
Db	5161	CTGAAGAGACTACTCATGTGTGTATGAAGACAGATGCTGAGTTGTGTGTGAACGGACAC	5220
OY	5221	TGAATATATTTCTAAGAAATTCGGGAGAGAAATGGGTAGTTAGCTATTTCTGGGTGACC	5280

Db	5221	TGAAATATTTTCTAGGAATTCGGGAGGAAAATGGTAGTACTATTTCTGGGTGACC	5280
Oy	5281	AGTCTATTAAGAAAAGAAAATGCTGAATGAGCATATTTTGAAGTCAGAGGAGATGTGG	5340
Db	5281	AGTCTATTAAGAAAAGAAAATGCTGAATGAGCATATTTTGAAGTCAGAGGAGATGTGG	5340
Oy	5341	TCAAATGGAAAACCCACCAAGGTCCAAAGCGACGAAGAAGATCCCGAGACAGAAGATCT	5400
Db	5341	TCATGGAAGAAACCCCAAGGTCCAAAGCGACGAAGAAGATCCCGAGACAGAAGATCT	5400
Oy	5401	TCAGGGGGCTAGAAAATCTGTTGCTATGAGGCCCTTACACAATGACCCACAGATCAACTGG	5460
Db	5401	TCAGGGGGCTAGAAAATCTGTTGCTATGAGGCCCTTACACAATGACCCACAGATCAACTGG	5460
Oy	5461	AATGATGCTACAGCTGTGTGCTCTGTGTGTAAGAGCTTTCATCATTCACCCCTTG	5520
Db	5461	AATGATGCTACAGCTGTGTGCTCTGTGTGTAAGAGCTTTCATCATTCACCCCTTG	5520
Oy	5521	GCACAGGTTCACACCCCAATGTGTGTGTGACGCCACAGATGCGCTGGACAGAGACAAATGCT	5580
Db	5521	GCACAGGTTCACACCCCAATGTGTGTGTGACGCCACAGATGCGCTGGACAGAGACAAATGCT	5580
Oy	5581	TCATGCAATTTGGGAGAGATGTGTGAGGACCTGTGTGATCCGACAGATGGGTGTGGACA	5640
Db	5581	TCATGCAATTTGGGAGAGATGTGTGAGGACCTGTGTGATCCGACAGATGGGTGTGGACA	5640
Oy	5641	GTGTGACACTGTACCAAGTGTCCAGAGCTGGAACACTTACCTGATTAATCCCAATCCCCACA	5700
Db	5641	GTGTGACACTGTACCAAGTGTCCAGAGCTGGAACACTTACCTGATTAATCCCAATCCCCACA	5700
Oy	5701	GCACACTACTGA 5711	
Db	5701	GCACACTACTGA 5711	

RESULT 4
 US-08-658-322-1
 Sequence 1, Application US/08658322
 Patent No. 5869245
 GENERAL INFORMATION:
 APPLICANT: Yeung, Anthony T.
 TITLE OF INVENTION: Mismatch Endonuclease And Its Use in
 TITLE OF INVENTION: Identifying Mutations In Targeted Polynucleotide Strands
 NUMBER OF SEQUENCES: 13
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Dann, Dorfman, Herrell and Skillman, P.C.
 STREET: 1601 Market Street, Suite 720
 CITY: Philadelphia
 STATE: PA
 COUNTRY: USA
 ZIP: 19103-2307
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: PatentIn Release #1.0, Version #1.30
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/658,322
 FILING DATE: 05-JUN-1996
 CLASSIFICATION: 435
 ATTORNEY/AGENT INFORMATION:
 NAME: Hagan, Patrick J.
 REGISTRATION NUMBER: 27,643
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (215) 563-4100
 TELEFAX: (215) 563-4044
 INFORMATION FOR SEQ ID NO: 1:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 5711 base pairs
 TYPE: nucleic acid
 STRANDEDNESS: double
 TOPOLOGY: not relevant

MOLECULE TYPE: DNA (genomic)
HYPOTHETICAL: NO
ANTI-SENSE: NO
US-08-658-322-1

Query Match 99.9%; Score 5707.8; DB 2; Length 5711;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 5709; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 AGCTGCTGAGACTTCTCTGAGACCCCGACACAGCTGTGGGTTTCTCAGATTAAGTGGGCC 60
DB 1 AGCTGCTGAGACTTCTCTGAGACCCCGACACAGCTGTGGGTTTCTCAGATTAAGTGGGCC 60
QY 61 CCTGCGCTCAGAGAGCCCTTCCACCTGCTGCTGGTAAAGTCAATTTGGAACAGAAAGAAA 120
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QY 121 TGAATTTATCTGCTCTTGGGTTGAGAGATCAAAAATGTCATTAATGCTATGCGAGAAA 180
DB 121 TGAATTTATCTGCTCTTGGGTTGAGAGATCAAAAATGTCATTAATGCTATGCGAGAAA 180
QY 181 TCTTAGAGTCCCATCTGTCTGGAGTTGATCAAGAACTGTCTCCAAAAGTGTACC 240
DB 181 TCTTAGAGTCCCATCTGTCTGGAGTTGATCAAGAACTGTCTCCAAAAGTGTACC 240
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DB 301 GTCCTTTATGTAAAGATGATATACCAAAAAGAGCTTCAAGAAAGTACAGATTTAGTC 360
QY 361 AACTGTGTGAAGAGCTATTTGAAAATCATTTGTGCTTTTCAAGCTTGACACAGGTTTGAAGT 420
DB 361 AACTGTGTGAAGAGCTATTTGAAAATCATTTGTGCTTTTCAAGCTTGACACAGGTTTGAAGT 420
QY 421 ATGCAAAACAGCTATATTTTGCATGCTGTAACCTCTCCGAGACATCTAAAGATG 480
DB 421 ATGCAAAACAGCTATATTTTGCATGCTGTAACCTCTCCGAGACATCTAAAGATG 480
QY 481 AAGTTCTATCATCCAAAGATATGGGCTACAGAAAACCGTGCCTTCTTACAGATG 540
DB 481 AAGTTCTATCATCCAAAGATATGGGCTACAGAAAACCGTGCCTTCTTACAGATG 540
QY 541 AACCCGAAAATCTCTCTTCCAGAGAAACAGTCTCAAGTGTCCAACTCTTAAACCTTGAA 600
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DB 601 CTGTGAGAACTCTGAGAACAAAGAGCGGATACAAACCTCAAAAAGAGCTGTACATG 660
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DB 661 AATTGGATCTGATCTTCTGAAAGATACCGTTAATAAGGCACTTATGCAAGTGTGGAG 720
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DB 721 ATCAAGAAATGTTTCAAAATACCCCTCAAGAAACCAAGGATGAAATAGTTGGATCTG 780
QY 781 CAAAAAAGGCTGCTTGTGAATTTTCTGAGAGGATGTAACAAATGTAACATCATAC 840
DB 781 CAAAAAAGGCTGCTTGTGAATTTTCTGAGAGGATGTAACAAATGTAACATCATAC 840
QY 841 CCAATTAATATGATTTGAACACCACTGAGAAAGGCTGAGAGGCACTCCAGAAAAGT 900
DB 841 CCAATTAATATGATTTGAACACCACTGAGAAAGGCTGAGAGGCACTCCAGAAAAGT 900
QY 901 ATCAGGATATGTTCTGTTCAAACTGTGATGTGAGCCATGTGACAAAATACTATGCA 960
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DB 1081 GGGCTGGAATGAGAAACATGTATATGATAGCCGAGCTCCAGCACAGAAAAAGGTAG 1140
QY 1141 ATCTGAATGCTGATCCCTGTGTGAGAGAAAGATGGAATTAACAGAACTGTCATGCT 1200
DB 1141 ATCTGAATGCTGATCCCTGTGTGAGAGAAAGATGGAATTAACAGAACTGTCATGCT 1200
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QY 1261 AAGTTAATGAGTGTCTTCCAGAAAGTATGATGATAGTTGCTGATGACTCACATGATG 1320
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QY 1321 GGGAGTCTGATCAAAATGCCAAAGTACGTGATGATGATGATGATGATGATGATGATG 1380
DB 1321 GGGAGTCTGATCAAAATGCCAAAGTACGTGATGATGATGATGATGATGATGATGATG 1380
QY 1381 AATATTCGTGTTCTTCCAGAGAAATAGACTTACTGAGCAGATGATCTCATAGAGCTTTAA 1440
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QY 1441 TATGTAAAGTGAAGAGGTTCTCCTCAAAATCAGTATGATGATGATGATGATGATGATG 1500
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QY 1561 TAAATTAAGAGAGATTTGTTACTGAGCCACAGATTAATACAAAGAGCTGCCCTCAATA 1620
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DB 1621 AATTAAAGCCTTAAAGAGAGACCTTACATCAGGCTTCTCATCTGAGAGATTTTATCAAG 1680
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QY 1741 AGAATGGTCAAGTATGATTAATTAATAGTGTGATGAGAAATTAAGAAAGTGTAT 1800
DB 1741 AGAATGGTCAAGTATGATTAATTAATAGTGTGATGAGAAATTAAGAAAGTGTAT 1800
QY 1801 CTATTCAGATGAGAAAAATCTTAACCAATAGATATGATGATGATGATGATGATGATG 1860
DB 1801 CTATTCAGATGAGAAAAATCTTAACCAATAGATATGATGATGATGATGATGATGATG 1860
QY 1861 AAAGGAAAGCTGAACCTTAAAGAGAGAGCTTAAAGCAATTAAGCAATTAAGCAATTAAG 1920
DB 1861 AAAGGAAAGCTGAACCTTAAAGAGAGAGCTTAAAGCAATTAAGCAATTAAGCAATTAAG 1920
QY 1921 ACAATTCAAAAGACCTTAAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGATTC 1980
DB 1921 ACAATTCAAAAGACCTTAAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGATTC 1980
QY 1981 ATGCGCTTGAACATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 2040
DB 1981 ATGCGCTTGAACATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 2040
QY 2041 TTGATAGTGTCTAGCAGTGAAGAGATTAAGAAAAAAGTCAACCAATGCAAGTCA 2100

|||||
Db 2041 TTGATGTTGCTAGAGAGAGATAAAGAAAAAGTACACCAAAATGCCAGTCA 2100
QY 2101 GGCACAGCAAAACCTCAACATCATGAGAGTAAGAACCTGCACATCGAGCCAAAGAA 2160
Db 2101 GGCACAGCAAAACCTCAACATCATGAGAGTAAGAACCTGCACATCGAGCCAAAGAA 2160
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Db 2221 AGTTAACCAATGACACCTGGTTCTTTCTAAGTGTAAATACCAAGTGAAGT 2280
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Db 2341 CTAAATAATGCTAGAGACCCCAAGATCTCATGTTAAGTGAAGAGGTTTGCACATG 2400
QY 2401 AAGATCTGAGAGAGAGATGATTCATGTTGACCTGATGATGATGATGATGATGATG 2460
Db 2401 AAGATCTGAGAGAGAGATGATTCATGTTGACCTGATGATGATGATGATGATGATG 2460
QY 2461 AAGATCTGAGAGAGAGATGATTCATGTTGACCTGATGATGATGATGATGATGATG 2520
Db 2461 AAGATCTGAGAGAGAGATGATTCATGTTGACCTGATGATGATGATGATGATGATG 2520
QY 2521 GTGTGAGTCAAGTGTGACGATTTGAAACCCCAAGAGGATTAATCATGTTTCCAAAG 2580
Db 2521 GTGTGAGTCAAGTGTGACGATTTGAAACCCCAAGAGGATTAATCATGTTTCCAAAG 2580
QY 2581 ATAAATGAATGACACAGAGGCTTAAATGATCATGTTGAGGACATGAAGTTAACACATG 2640
Db 2581 ATAAATGAATGACACAGAGGCTTAAATGATCATGTTGAGGACATGAAGTTAACACATG 2640
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TELEX:
: INFORMATION FOR SEQ ID NO: 1:
: SEQUENCE CHARACTERISTICS:
:   LENGTH: 5712
:   TYPE: nucleic acid
:   STRANDEDNESS: double
:   TOPOLOGY: linear
:   MOLECULE TYPE: cDNA to mRNA
:   HYPOTHETICAL: no
:   ANTI-SENSE: no
:   ORIGINAL SOURCE:
:     ORGANISM: Homo sapiens
:     INDIVIDUAL ISOLATE:
:     DEVELOPMENTAL STAGE: adult
:     TISSUE TYPE: female breast
:     CELL TYPE: ductal carcinoma in situ, invasive
:     CELL TYPE: breast cancer and normal breast tissue
:     CELL LINE: not derived from a cell line
:     ORGANELLE: no
:   IMMEDIATE SOURCE:
:     LIBRARY: cDNA library derived from human
:     CLONE: obtained using published sequence
:     POSITION IN GENOME:
:     CHROMOSOME/SEGMENT: unknown
:     MAP POSITION: unknown
:     UNITS: unknown
:   FEATURE:
:     NAME/KEY: BRCA1
:     LOCATION: Genbank accession no. U14680
:     IDENTIFICATION METHOD: microscopicallydirected
:     OTHER INFORMATION: gene encoding BRCA1 protein
:     PUBLICATION INFORMATION:
:       AUTHORS: Miki, Y., et. al.
:       TITLE: A strong candidate gene for the breast and
:       TITLE: ovarian cancer susceptibility gene BRCA1.
:       JOURNAL: Science
:       VOLUME: 266
:       PAGES: 66-71
:       DATE: 1994
:     RELEVANT RESIDUES IN SEQ ID NO: 1:
:   US-08-603-753D-1
:
Query Match          99.9%; Score 5707.8; DB 2; Length 5712;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 5709; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

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Db 421 ATGCAACAGCTATATTTTGCAAAAAGAAATTAATCTCTGACATCTATAAGATG 480
Qy 481 AAGTTTCTATCATCCAAAGTATGGGCTACAGAAACCGTGCCAAAGACTCTACAGATG 540
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Qy 541 AACCCGAAATCCCTCCCTGAGAGAAACCACTCTCAGTCCACTCTCAACCTTGAA 600
Db 541 AACCCGAAATCCCTCCCTGAGAGAAACCACTCTCAGTCCACTCTCAACCTTGAA 600
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Qy 5641 GTGTAGCACTTACAGAGGCGAGAGGCTGAGACCTTACCTGATACCCAGATGCCAGCA 5700
Db 5641 GTGTAGCACTTACAGAGGCGAGAGGCTGAGACCTTACCTGATACCCAGATGCCAGCA 5700
Qy 5701 GCCACTACTGA 5711
Db 5701 GCCACTACTGA 5711
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RESULT 6
us-09-099-753-1
: Sequence 1, Application us/09099753
: Patent No. 6149903
: GENERAL INFORMATION:
: APPLICANT: HOLT, JEFFREY T.

APPLICANT: JENSEN, ROY A.
 APPLICANT: PAGE, DAVID L.
 APPLICANT: KING, MARY-CLARE
 APPLICANT: SZABO, CSILLA I.
 APPLICANT: JEFFON, THOMAS L.
 APPLICANT: ROBINSON-BENION, CHERYL L.
 APPLICANT: THOMPSON, MARILYN E.
 TITLE OF INVENTION: CHARACTERIZED BRCA1 AND BRCA2
 TITLE OF INVENTION: PROTEINS AND SCREENING AND THERAPEUTIC METHODS BASED ON
 TITLE OF INVENTION: CHARACTERIZED BRCA1 AND BRCA2 PROTEINS.
 NUMBER OF SEQUENCES: 29
 CORRESPONDENCE ADDRESSES:
 ADDRESSEE: ARLES A. TAYLOR, JR.
 STREET: SUITE 1401, UNIVERSITY TOWER, 3100 TOWER
 STREET: BOULEVARD
 CITY: DURHAM
 STATE: NORTH CAROLINA
 COUNTRY: USA
 ZIP: 27707
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Diskette, 3.50 inch, 800 KB storage
 OPERATING SYSTEM: Windows 3.1
 SOFTWARE: WORD PERFECT 6.1 and ASCII
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/09/099,753
 FILING DATE:
 CLASSIFICATION:
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: 08/603,753
 FILING DATE: 20 FEB 1996
 APPLICATION NUMBER: U.S. 08/373,799
 FILING DATE: 17 JAN 1995
 ATTORNEY/AGENT INFORMATION:
 NAME: ARLES A. TAYLOR, JR.
 REGISTRATION NUMBER: 39,395
 REFERENCE/DOCKET NUMBER: 1242/2
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (919) 493-8000
 TELEFAX: (919) 419-0383
 TELEX:
 INFORMATION FOR SEQ ID NO: 1:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 5712
 TYPE: nucleic acid
 STRANDEDNESS: double
 TOPOLOGY: linear
 MOLECULE TYPE: cDNA to mRNA
 HYPOTHETICAL: no
 ANTI-SENSE: no
 ORIGINAL SOURCE:
 ORGANISM: Homo sapiens
 INDIVIDUAL ISOLATE:
 DEVELOPMENTAL STAGE: adult
 TISSUE TYPE: female breast
 CELL TYPE: ductal carcinoma in situ, invasive
 CELL TYPE: breast cancer and normal breast tissue
 CELL LINE: not derived from a cell line
 ORGANELLER: no
 IMMEDIATE SOURCE:
 LIBRARY: cDNA library derived from human
 CLONE: obtained using published sequence
 POSITION IN GENOME:
 CHROMOSOME/SEGMENT: unknown
 MAP POSITION: unknown
 UNITS: unknown
 FEATURE:
 NAME/KEY: BRCA1
 LOCATION: Genbank accession no. U14680
 IDENTIFICATION METHOD: microscopically directed
 IDENTIFICATION METHOD: sampling and nuclease protection assay
 OTHER INFORMATION: gene encoding BRCA1 protein
 PUBLICATION INFORMATION:

AUTHORS: Miki, Y., et. al.
 TITLE: A strong candidate gene for the breast and
 TITLE: ovarian cancer susceptibility gene BRCA1.
 JOURNAL: Science
 VOLUME: 266
 PAGES: 66-71
 DATE: 1994
 RELEVANT RESIDUES IN SRQ ID NO: 1:
 US-09-099-753-1
 Query Match 99.9%; Score 5707.8; DB 3; Length 5712;
 Best Local Similarity 100.0%; Pred. No. 0;
 Matches 5709; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
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OY	3181	GTACAGTGTAGCACATTAAGCCGTAAATACATTTAGAGAAAATGTTTTTAAAGAACCCAGCT	3240
Db	3181	GTACAGTGTAGCACATTAAGCCGTAAATACATTTAGAGAAAATGTTTTTAAAGAACCCAGCT	3240
OY	3241	CAACCAATATTAATGAAGTAGTCCAGTACTATGAAGTGGGCTCCAGTATTAATGAAA	3300
Db	3241	CAACCAATATTAATGAAGTAGTCCAGTACTATGAAGTGGGCTCCAGTATTAATGAAA	3300
OY	3301	TAGGTTCCAGTATGAAAACATTCACACAGAACTAGTAGAAAACAGAGGGCCAAAATTTGA	3360
Db	3301	TAGGTTCCAGTATGAAAACATTCACACAGAACTAGTAGAAAACAGAGGGCCAAAATTTGA	3360
OY	3361	ATGCTATAGCTTAGATTAGGGGGTTTGCACACCTGAGGCTATTAACCAAAAGTCTTCGTGAA	3420
Db	3361	ATGCTATAGCTTAGATTAGGGGGTTTGCACACCTGAGGCTATTAACCAAAAGTCTTCGTGAA	3420
OY	3421	GTAATTGTAAAGCATCCCGAAATTAAGAAAGCAAGATATGAAGAGTGGTTCAGCTGTTA	3480
Db	3421	GTAATTGTAAAGCATCCCGAAATTAAGAAAGCAAGATATGAAGAGTGGTTCAGCTGTTA	3480
OY	3481	ATTACAGATTTCTCCATATCTGATTTTCAGATTACTTAGAAACAGCCTATGGGAAGTATGTC	3540
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OY	3541	ATGCATCTCAGGTTGGTTCTGTAGACACCTGATGACCTGTTAGATGATGGTAAATTAAGG	3600
Db	3541	ATGCATCTCAGGTTGGTTCTGTAGACACCTGATGACCTGTTAGATGATGGTAAATTAAGG	3600
OY	3601	AAGATTAAGTTTGGCTGAAAAATACATTAAGAAAGTTGCGCTGTTTATGCAAAAAGCG	3660
Db	3601	AAGATTAAGTTTGGCTGAAAAATACATTAAGAAAGTTGCGCTGTTTATGCAAAAAGCG	3660
OY	3661	TCCAGAAAGGAGAGCTTAGCAGAGAGCTAGCCCTTACACCAATACATTTGGCTCAGG	3720
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OY	3721	GTTACCGAAGAGGGGCCAAGAAATTAGAGTCCCTCAGAAAGAACTTACTAGTAGAGATG	3780
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OY	3781	AAGAGCTTCCCTGCTTCCAAACACTTGTATTGGTAAAGTAAACATATACCTTCTCAGT	3840
Db	3781	AAGAGCTTCCCTGCTTCCAAACACTTGTATTGGTAAAGTAAACATATACCTTCTCAGT	3840
OY	3841	CTACTAGGCAATAGACCGGTGTGCTACGAGAGTGTCTGTAAAGAACACAGAGAGAAATTTAT	3900
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Db	4021	GTTGAATTTGGAAGACTTACTGTGCAAAATCAAAACACCCAGGATCCCTTTTGTATATGGTCTTT	4080
OY	4081	CCAAACAAATGAGGATCATGCTGTAAAGCCAGGAGTTGGTCTAGTGACAAAGAAATTTGG	4140
Db	4081	CCAAACAAATGAGGATCATGCTGTAAAGCCAGGAGTTGGTCTAGTGACAAAGAAATTTGG	4140
OY	4141	TTTTCAGATGATGAAGAAAGAGAAAGGGGCTTGGAAAGAAATATCAAGAAAGGCAAAAGCA	4200
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RESULT 8
US-09-007-678B-47
; Sequence 47, Application US/09007678B
; Patent No. 6342483
; GENERAL INFORMATION:
; APPLICANT: HOIT, JEFFREY T.
; APPLICANT: JENSEN, ROY A.
; APPLICANT: PAGE, DAVID L.
; APPLICANT: OBERMILLER, PATRICE S.
; APPLICANT: ROBINSON-BENION, CHERYL L.
; APPLICANT: THOMPSON, MARLYN E.
; TITLE OF INVENTION: METHOD FOR DETECTION AND TREATMENT OF BREAST CANCER
; FILE REFERENCE: Attorney Docket No. 6342483 1242-1-2-2
; CURRENT FILING DATE: 1998-01-15
; PRIOR APPLICATION NUMBER: 08/373,799
; PRIOR FILING DATE: 1995-01-17
; PRIOR APPLICATION NUMBER: 08/182,961
; NUMBER OF SEQ ID NOS: 61
; SOFTWARE: Microsoft Wordpad.
; SEQ ID NO 47
; LENGTH: 5712
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (120)..(5708)

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; NAME/KEY: misc.feature
; LOCATION: (4532)..(4535)
; OTHER INFORMATION: xaa-any amino acid
US-09-007-678B-47

Query Match
Best Local Similarity 100.0%; Pred. No. 0;
Matches 5709; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

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Db	5701	GGCACTACTGA 5711	

RESULT 9
 US-08-480-784-1
 Sequence 1, Application US/08480784
 Patent No. 5693473
 GENERAL INFORMATION:
 APPLICANT: Skolnick, Mark H.
 APPLICANT: Goldgar, David E.
 APPLICANT: Miki, Yoshio
 APPLICANT: Svenson, Jeff
 APPLICANT: Kamb, Alexander
 APPLICANT: Harshman, Keith D.
 APPLICANT: Shattuck-Eidens, Donna M.
 APPLICANT: Tavtigian, Sean V.
 APPLICANT: Wiseman, Roger W.
 APPLICANT: Futreal, P. Andrew
 TITLE OF INVENTION: 17q-Linked Breast and Ovarian Cancer
 NUMBER OF SEQUENCES: 85
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Venable, Baetjer, Howard & Civiletti, LLP
 STREET: 1201 New York Avenue, N.W., Suite 1000
 CITY: Washington
 STATE: DC
 COUNTRY: USA
 ZIP: 20005
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: PatentIn Release #1.0, Version #1.30
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/480,784
 FILING DATE:
 CLASSIFICATION: 435
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/409,305
 FILING DATE: 24-MAR-1995
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/348,824
 FILING DATE: 29-NOV-1994
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/308,104
 FILING DATE: 16-SEP-1994
 PRIOR APPLICATION DATA:

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? APPLICATION NUMBER: US 08/300,266
? FILING DATE: 02-SEP-1994
? PRIOR APPLICATION DATA:
? APPLICATION NUMBER: US 08/289,221
? FILING DATE: 12-AUG-1994
? ATTORNEY/AGENT INFORMATION:
? NAME: Ihnen, Jeffrey L.
? REGISTRATION NUMBER: 28,957
? REFERENCE/DOCKET NUMBER: 24884-109347
? TELECOMMUNICATION INFORMATION:
? TELEPHONE: 202-962-4810
? TELEFAX: 202-962-8300
? INFORMATION FOR SEQ. ID NO.: 1:
? SEQUENCE CHARACTERISTICS:
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? TOPOLOGY: linear
? MOLECULE TYPE: cDNA
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? ANTI-SENSE: NO
? ORIGINAL SOURCE:
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? OS-08-480-784-1

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Query Match	99.9%;	Score 5707.8;	DB 1;	Length 5914;
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Db	3301	TAGGTTCCAGTAGTAAGAAACATTCAGAGAACTGTATGAAACAGAGGCCAAATTTGA	3360
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Db	3361	ATGCTATGCTTAGATTAGGAGGTTTTTGGCAACCTGAGAGCTTATTAACAAAGTCTCTGGA	3420
QY	3421	GTAATTTGTAAGCATCTCTGCAAAATTAAGAAACAAATTAAGAAAGTACTGACTGTA	3480
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Db	3481	ATACAGATTTCTCTCATATCTGATTTAGATTAACCTTGAACACAGCCTTATGGGAAGTATC	3540
QY	3541	ATGATCTCAGGTTTTGTTCTGAGACACCTGATGACCTGTATGATGATGCTGAATTAAG	3600
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RESULT 10
 US-08-483-553-1
 : Sequence 1, Application US/08483553
 : Patent No. 5708999
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 : GENERAL INFORMATION:
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 : APPLICANT: Skolnick, Mark H.
 : APPLICANT: Goldgar, David E.
 : APPLICANT: Miki, Yoshio
 : APPLICANT: Swenson, Jeff
 : APPLICANT: Kamb, Alexander
 : APPLICANT: Harshman, Keith D.
 : APPLICANT: Shattuck-Eldens, Donna M.
 : APPLICANT: Tavligian, Sean V.
 : APPLICANT: Wiseman, Roger W.
 : APPLICANT: Futreal, P. Andrew
 : TITLE OF INVENTION: 17q-Linked Breast and Ovarian Cancer
 : TITLE OF INVENTION: Susceptibility Gene
 : NUMBER OF SEQUENCES: 85
 :
 : CORRESPONDENCE ADDRESS:
 :
 : ADDRESSEE: Venable, Baetjer, Howard & Civiletti, LLP
 : STREET: 1201 New York Avenue, N.W., Suite 1000

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? CITY: Washington
? STATE: DC
? COUNTRY: USA
? ZIP: 20005
? COMPUTER READABLE FORM:
? MEDIUM TYPE: Floppy disk
? COMPUTER: IBM PC compatible
? OPERATING SYSTEM: PC-DOS/MS-DOS
? SOFTWARE: Patent Release #1.0, Version #1.30
? CURRENT APPLICATION DATA:
? APPLICATION NUMBER: US/08/483,553
? FILING DATE:
? CLASSIFICATION: 435
? PRIOR APPLICATION DATA:
? APPLICATION NUMBER: US 08/409,305
? FILING DATE: 24-MAR-1995
? PRIOR APPLICATION DATA:
? APPLICATION NUMBER: US 08/348,824
? FILING DATE: 29-NOV-1994
? PRIOR APPLICATION DATA:
? APPLICATION NUMBER: US 08/308,104
? FILING DATE: 16-SEP-1994
? PRIOR APPLICATION DATA:
? APPLICATION NUMBER: US 08/300,266
? FILING DATE: 02-SEP-1994
? PRIOR APPLICATION DATA:
? APPLICATION NUMBER: US 08/289,221
? FILING DATE: 12-AUG-1994
? ATTORNEY/AGENT INFORMATION:
? NAME: Ihnen, Jeffrey L.
? REGISTRATION NUMBER: 28,957
? REFERENCE/DOCKET NUMBER: 24884-109347
? TELECOMMUNICATION INFORMATION:
? TELEPHONE: 202-962-4810
? TELEFAX: 202-962-8300
? INFORMATION FOR SEQ ID NO: 1:
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? LENGTH: 5914 base pairs
? TYPE: nucleic acid
? STRANDEDNESS: double
? TOPOLOGY: linear
? MOLECULE TYPE: cDNA
? HYPOTHEetical: NO
? ANTI-SENSE: NO
? ORIGINAL SOURCE:
? ORGANISM: Homo sapiens
? FEATURE:
? NAME/KEY: CDS
? LOCATION: 120..5711
? US-08-483-553-1

Query Match          99.9%; Score 5707.8; DB 1; Length 5914;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 5709; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

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Db       181 TCTTAGAGATGCCCATCTGTCTGTGAGAGTTGATCAAGAACTGTCTCCACAAAGTGTGACC 240
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Db       241 ACATATTTTGGCAAAATTTTGCATGCTGAAACTTCTC AACAGAGAAAGGCGCTTCACAGT 300
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Db 5701 GCCACTACTGA 5711

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RESULT 11

US-08-487-002-1

Sequence 1, Application US/08487002

Patent No. 5710001

GENERAL INFORMATION:

APPLICANT: Shattuck-Eidens, Donna M.

APPLICANT: Simard, Jacques

APPLICANT: Eml, Mitsuru

APPLICANT: Nakamura, Yusuke

APPLICANT: Duracher, Francine

TITLE OF INVENTION: 17q-Linked Breast and Ovarian Cancer

NUMBER OF SEQUENCES: 85

CORRESPONDENCE ADDRESS:

ADDRESSEE: Venable, Baetjer, Howard & Civiletti, LLP

STREET: 1201 New York Avenue, N.W., Suite 1000

CITY: Washington

STATE: DC

COUNTRY: USA

ZIP: 20005

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patent Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/487,002

FILING DATE:

CLASSIFICATION: 424

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/409,305

FILING DATE: 24-MAR-1995

PRIOR APPLICATION DATA:

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FILING DATE: 29-NOV-1994

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/308,104

FILING DATE: 16-SEP-1994

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/300,266

FILING DATE: 02-SEP-1994

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/289,221

FILING DATE: 12-AUG-1994

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REFERENCE/DOCKET NUMBER: 24884-109347

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TELEPHONE: 202-962-4810

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INFORMATION FOR SEQ ID NO: 1:

SEQUENCE CHARACTERISTICS:

LENGTH: 5914 base pairs

TYPE: nucleic acid

STRANDEDNESS: double

TOPOLOGY: linear

MOLECULE TYPE: cDNA

HYPOTHETICAL: NO

ANTI-SENSE: NO

ORIGINAL SOURCE:

ORGANISM: Homo sapiens

FEATURE:

NAME/KEY: CDS

LOCATION: 120..5711

US-08-487-002-1

Query Match

99.9%: Score 5707.8; DB 1; Length 5914;

Best Local Similarity 100.0%; Pred. No. 0;

Matches 5709; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

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Db	1	AGCTGCGTGAACCTTCCTGGACCCCGACACCGCTGCGGGTTCCTGATTAATCGGGCC	60
QY	61	CCTGCGCTGAGGAGGCGCTTCACCCCTGCTGTGGGTAAAGTCAATCTGGACAGAAAGAA	120
Db	61	CCTGCGCTGAGGAGGCGCTTCACCCCTGCTGTGGGTAAAGTCAATCTGGACAGAAAGAA	120
QY	121	TGGATTTATCTGCTCTTGGCGGTTGAGAGATACAAATGTCAATTAAATGCTATGACAGAAA	180
Db	121	TGGATTTATCTGCTCTTGGCGGTTGAGAGATACAAATGTCAATTAAATGCTATGACAGAAA	180
QY	181	TCTTAAGAGTGCCCATCTGCTGTGGAGTTGATCAAGAACCTGTCTCCCAAAAGTGTACC	240
Db	181	TCTTAAGAGTGCCCATCTGCTGTGGAGTTGATCAAGAACCTGTCTCCCAAAAGTGTACC	240
QY	241	ACATATTTTGGAAATTTTGGATGCGTAACCTTCACACCAAGAAAGGCGCTTCACAGT	300
Db	241	ACATATTTTGGAAATTTTGGATGCGTAACCTTCACACCAAGAAAGGCGCTTCACAGT	300
QY	301	GTCTTTATGTAGAAATGATATTAACAAAGAGCGCTACAAAGAAAGTACGAGATTTTACTC	360
Db	301	GTCTTTATGTAGAAATGATATTAACAAAGAGCGCTACAAAGAAAGTACGAGATTTTACTC	360
QY	361	AACCTGTGTGAAGACTATGTGAATTCATTTTGCTTTACGTTTGACACAGTTTGGAGT	420
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QY	481	AAGTTTCTATCATCCAAAGATGCGCTACAGAAAACCGTCCCAAAAGACTTTCAGAGATG	540
Db	481	AAGTTTCTATCATCCAAAGATGCGCTACAGAAAACCGTCCCAAAAGACTTTCAGAGATG	540
QY	541	AAACCGGAAATTCCTCTCTGCGAGAAACCACTCACTGCTGCTCACTCTTAACCTTGGAA	600
Db	541	AAACCGGAAATTCCTCTCTGCGAGAAACCACTCACTGCTGCTCACTCTTAACCTTGGAA	600
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Db	601	CTGTGAAACACTCTGAGACAAAGAGGCGATACAACTCAAAAGACGCTGTACATTTG	660
QY	661	AATGGGATCTGATCTTCTGGAATACCGTTAATAAGGCAACTTATTCAGTGTGGAG	720
Db	661	AATGGGATCTGATCTTCTGGAATACCGTTAATAAGGCAACTTATTCAGTGTGGAG	720
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Db	721	ATCAAGATTTGTACAAATCACCCCTCAAGGACACAGGATGAATCATGTTGGATTCTG	780
QY	781	CAAAAAAGGCGCTTGTGAATTTCTGAGAGGATGTAACAAATACGAATCATCATAC	840
Db	781	CAAAAAAGGCGCTTGTGAATTTCTGAGAGGATGTAACAAATACGAATCATCATAC	840
QY	841	CCACTAATTAATGATTTTAACACCACTGAGAGGCTGACGTGAGAGGCTACCAAAAAAGT	900
Db	841	CCACTAATTAATGATTTTAACACCACTGAGAGGCTGACGTGAGAGGCTACCAAAAAAGT	900
QY	901	ATCAGGCTAGTCTGTTCAAACTTGATGATGAGCATGTGGACAATAATCTATGCCA	960
Db	901	ATCAGGCTAGTCTGTTCAAACTTGATGATGAGCATGTGGACAATAATCTATGCCA	960
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Db	1201	CAGAGAACTCTAGAGATCTGAGAGATGTTCTTGATATACCTAATATGCACTTCAGA	1260
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Db	1381	AATATTTGTTGTTCTCAGAGAAATAGACTTACTGGCCAGTGATCTCATGAGGCTTTAA	1440
QY	1441	TATGTAAAGTGAAGAAGTTCACTCCCAATCAGTAGAGATATATTTGAACACAAATAT	1500
Db	1441	TATGTAAAGTGAAGAAGTTCACTCCCAATCAGTAGAGATATATTTGAACACAAATAT	1500
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QY	1741	AGATGCTCAAGTGTGAATATTACTAATAGTGTGATGAGATATTAACCAAAAGGTGATT	1800
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QY	1861	AAAGCAAAAGCTGAACCTTAAGCAGCAGCATTAAGCAATATGAACTGCAATTAATATTC	1920
Db	1861	AAAGCAAAAGCTGAACCTTAAGCAGCAGCATTAAGCAATATGAACTGCAATTAATATTC	1920
QY	1921	ACAATTTCAAAAGCACTTAAAAAGATAGGCTGAGAGAGGAAGTCTTCTACAGCATATTC	1980
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Db	2041	TTGATATGTTGTTCTACGAGTGAAGAGATTAAGAAAAAAGTACAACCAATATGCGACATCA	2100
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5701 GCCACTACTGA 5711
DB GCCACTACTGA 5711

RESULT 12
US-08-483-554B-1
Sequence 1, Application US/08483554B
Patent No. 5747282
GENERAL INFORMATION:
APPLICANT: SKOLNICK, Mark H.
APPLICANT: GOLDBERG, David E.
APPLICANT: MIKI, Yoshio
APPLICANT: Swenson, Jeff
APPLICANT: Kamb, Alexander
APPLICANT: Harshman, Keith D.
APPLICANT: Shattuck-Eidens, Donna M.
APPLICANT: Tavliyan, Sean V.
APPLICANT: Wiseman, Roger W.
APPLICANT: Futreal, P. Andrew
TITLE OF INVENTION: 17q-Linked Breast and Ovarian Cancer
NUMBER OF SEQUENCES: 85
CORRESPONDENCE ADDRESS:
ADDRESSEE: Venable, Baetjer, Howard & Civiletti, LLP
STREET: 1201 New York Avenue, N.W., Suite 1000
CITY: Washington
STATE: DC
COUNTRY: USA
ZIP: 20005
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/483, 554B
FILING DATE: 07-JUN-1995
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/409,305
FILING DATE: 24-MAR-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/348, 824
FILING DATE: 29-NOV-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/308,104
FILING DATE: 16-SEP-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/300,266
FILING DATE: 02-SEP-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/289,221
FILING DATE: 12-AUG-1994
ATTORNEY/AGENT INFORMATION:
NAME: Ihnen, Jeffrey L.
REGISTRATION NUMBER: 28,957
REFERENCE/DOCKET NUMBER: 24884-109347

TELECOMMUNICATION INFORMATION:
: TELEPHONE: 202-962-4810
: TELEFAX: 202-962-8300
: INFORMATION FOR SEQ ID NO: 1:
: SEQUENCE CHARACTERISTICS:
: LENGTH: 5914 base pairs
: type: nucleic acid
: STRANDEDNESS: double
: TOPOLOGY: linear
: MOLECULE TYPE: cDNA
: HYPOTHETICAL: NO
: ANTI-SENSE: NO
: ORIGINAL SOURCE:
: ORGANISM: Homo sapiens
: FEATURE:
: NAME/KEY: CDS
: LOCATION: 120..5708
: US-08-483-554B-1

Query Match 99.9%; Score 5707.8; DB 1; Length 5914;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 5709; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

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Db 5701 GCCACTACTGA 5711

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RESULT 13
US-08-488-011B-1
: Sequence 1, Application US/08488011B
: Patent No. 5753441
: GENERAL INFORMATION:
: APPLICANT: SKOLNICK, Mark H.
: APPLICANT: GOLDFAR, David E.
: APPLICANT: MIKI, Yoshio
: APPLICANT: Swenson, Jeff
: APPLICANT: Kamb, Alexander
: APPLICANT: Harshman, Keith D.
: APPLICANT: Shattuck-Eidens, Donna M.
: APPLICANT: Tavligian, Sean V.
: APPLICANT: Wiseman, Roger W.
: APPLICANT: Futreal, P. Andrew
: TITLE OF INVENTION: 17q-Linked Breast and Ovarian Cancer
: NUMBER OF SEQUENCES: 85
: CORRESPONDENCE ADDRESS:
: ADDRESSEE: Venable, Baetjer, Howard & Civiletti, LLP
: STREET: 1201 New York Avenue, N.W., Suite 1000
: CITY: Washington
: STATE: DC
: COUNTRY: USA
: ZIP: 20005
: COMPUTER READABLE FORM:
: MEDIUM TYPE: Floppy disk
: COMPUTER: IBM PC compatible
: OPERATING SYSTEM: PC-DOS/MS-DOS
: SOFTWARE: PatentIn Release #1.0, Version #1.30

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CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/488, 011B
FILING DATE: 07-JUN-1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/409, 305
FILING DATE: 24-MAR-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/348, 824
FILING DATE: 29-NOV-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/308, 104
FILING DATE: 16-SEP-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/300, 266
FILING DATE: 02-SEP-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/289, 221
FILING DATE: 12-AUG-1994
ATTORNEY/AGENT INFORMATION:
NAME: Ihnen, Jeffrey L.
REGISTRATION NUMBER: 28,957
REFERENCE/DOCKET NUMBER: 24884-109347-09
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-962-4810
TELEFAX: 202-962-8300
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 5914 base pairs
TYPE: nucleic acid
STRADEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: CDNA
HYPOTHETICAL: NO
ANTI-SENSE: NO
ORIGINAL SOURCE:
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: CDS
LOCATION: 120..5708
US-08-488-011B-1

Query Match 99.9%; Score 5707.8; DB 1; Length 5914;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 5709; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

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Oy 5701 GCCACTACTGA 5711
Db 5701 GCCACTACTGA 5711

RESULT 14
US-08-850-727-1
; Sequence 1, Application US/08850727
; Patent No. 6162897
; GENERAL INFORMATION:
; APPLICANT: Skolnick, Mark H.
; APPLICANT: Goldgar, David E.

APPLICANT: Miki, Yoshio
APPLICANT: Swenson, Jeff
APPLICANT: Kamb, Alexander
APPLICANT: Harshman, Keith D.
APPLICANT: Shattuck-Eidens, Donna M.
APPLICANT: Tavligian, Sean V.
APPLICANT: Wiseman, Roger W.
APPLICANT: Futreal, P. Andrew
TITLE OF INVENTION: 17q-Linked Breast and Ovarian Cancer
TITLE OF INVENTION: Susceptibility Gene
NUMBER OF SEQUENCES: 85
CORRESPONDENCE ADDRESS:
ADDRESSEE: Venable, Baetjer, Howard & Civiletti, LLP
STREET: 1201 New York Avenue, N.W., Suite 1000
CITY: Washington
STATE: DC
COUNTRY: USA
ZIP: 20005
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/850,727
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/483,554
FILING DATE: 07-JUN-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/348,824
FILING DATE: 29-NOV-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/308,104
FILING DATE: 16-SEP-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/300,266
FILING DATE: 02-SEP-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/289,221
FILING DATE: 12-AUG-1994
ATTORNEY/AGENT INFORMATION:
NAME: Ihnen, Jeffrey L.
REGISTRATION NUMBER: 28,957
REFERENCE/DOCKET NUMBER: 24884-109347
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-962-4810
TELEFAX: 202-962-8300
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 5914 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: cDNA
HYPOTHETICAL: NO
ANTI-SENSE: NO
ORIGINAL SOURCE:
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: CDS
LOCATION: 120..5708
US-08-850-727-1

Query Match 99.9%; Score 5707.8; DB 4; Length 5914;
Best Local Similarity 100.0%; Pred. NO. 0;
Matches 5709; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1 AGCTCGCTGAGACTTCTGTGACCCGACAGAGGCTGTGGGTTTCTCAGATTAAGTGGCC 60
Db 1 AGCTCGCTGAGACTTCTGTGACCCGACAGAGGCTGTGGGTTTCTCAGATTAAGTGGCC 60

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Db 121 TGGATTATCTGCTCTTGGCGTTGAAGATTCATAAATGTCTATATGCTATGCAAAA 180
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Db 1921 ACAATTTAAAAAGCCTTAAGAAATAGGCTGAGAGAGAACTCTTCAACAGCATATTC 1980
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Db 2221 AGTTAACAAATGACCTGGTCTTTTACTAAGTGTCAAAATACCAAGTGAATTAAGAT 2280

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QY 3121 AAAACCTTTGAGAGAACTTCAATGACCTGAAAGAAAGAAAGTGAAGTGAAGTGAAG 3180
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QY 3361 ATGCTATGCTTAGATTAGGGGTTTTCACACCTGAGTCTATTAACAAGTCTTCCGTGGA 3420
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Db 5221 TGAATATTTCTGGAATTCGGGAGAGAAATGGAGTATTTCTGGGTGACCC 5280
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Db      5521 GCACAGGTGCCACCAATTTGTTGTGCAGCCAGATGCTGGACAGAGCAATGGCT 5580
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Db      5581 TCCATCAATTTGGGAGATGTGTGAGGACCCCTGTGTGACCCAGAGTGGTGTGGACA 5640
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QY      5701 GCCACTACTGA 5711
Db      5701 GCCACTACTGA 5711

RESULT 15
PCT-US95-10202-1
; Sequence 1, Application PC/TUS9510202
; GENERAL INFORMATION:
; APPLICANT: Shattuck-Eidens, Donna M.
; APPLICANT: Simard, Jacques
; APPLICANT: Eml, Mitsuru
; APPLICANT: Nakamura, Yusuke
; APPLICANT: Durocher, Francine
; TITLE OF INVENTION: In Vivo Mutations and Polymorphisms
; TITLE OF INVENTION: In the 17q-Linked Breast and Ovarian Cancer
; TITLE OF INVENTION: Susceptibility Gene
; NUMBER OF SEQUENCES: 85
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Venable, Baetjer, Howard & Civiletti, LLP
; STREET: 1201 New York Avenue, N.W., Suite 1000
; CITY: Washington
; STATE: DC
; COUNTRY: USA
; ZIP: 20005
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US95/10202
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US
; FILING DATE: 07-JUN-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/409,305
; FILING DATE: 24-MAR-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/348,824
; FILING DATE: 29-NOV-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08-308,104
; FILING DATE: 16-SEP-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/300,266
; FILING DATE: 02-SEP-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/289,221
; FILING DATE: 12-AUG-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Ihnen, Jeffrey L.
; REGISTRATION NUMBER: 28,957
; REFERENCE/DOCKET NUMBER: 24884-109347
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 202-962-4810
; TELEFAX: 202-962-8300
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 5914 base pairs

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; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
; HYPOTHEICAL: NO
; ANTI-SENSE: NO
; ORIGINAL SOURCE:
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: 120..5711
; PCT-US95-10202-1

Query Match      99.9%; Score 5707.8; DB 5; Length 5914;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 5709; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      1 AGCTCGCTGAGACTTCTCTGAGCCCGACAGGCTGTGGGTTTCTCAGATACTGGGCC 60
Db      1 AGCTCGCTGAGACTTCTCTGAGCCCGACAGGCTGTGGGTTTCTCAGATACTGGGCC 60
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SUMMARIES

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3	201	100.0	5711	1 US-08-798-691-5	Sequence 5, Appl1
4	201	100.0	5711	3 US-08-825-487A-1	Sequence 1, Appl1
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6	201	100.0	5711	3 US-09-074-476-1	Sequence 1, Appl1
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ALIGNMENTS

RESULT 1
US-08-598-591-1
Sequence 1, Application US/08598591
Patent No. 5654155
GENERAL INFORMATION:
APPLICANT: Allen, Antonette C.
APPLICANT: Alvares, Christopher P.
APPLICANT: Critz, Brenda S.
APPLICANT: Murphy, Patricia D.
APPLICANT: Olson, Sheri J.
APPLICANT: Schelter, Denise B.
APPLICANT: Zeng, Bin
TITLE OF INVENTION: A Consensus Sequence of the Human BRCA1 Gene
Patent No. 5654155
NUMBER OF SEQUENCES: 74
CORRESPONDENCE ADDRESS:
ADDRESSEE: BURNS, DOANE, SWECKER & MATHIS
STREET: 699 Prince St.
CITY: Alexandria
STATE: VA
COUNTRY: USA
ZIP: 22314
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/598,591
FILING DATE: herewith
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Swecker, Robert S.
REGISTRATION NUMBER: 19,885
REFERENCE/DOCKET NUMBER: 020160-282
TELECOMMUNICATION INFORMATION:
TELEPHONE: 703-836-6620
TELEFAX: 703-836-2021
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 5711 base pairs
TYPE: nucleic acid
STRANDEDNESS: not relevant
TOPOLOGY: linear
MOLECULE TYPE: cDNA
ORIGINAL SOURCE:
ORGANISM: Homo sapiens
STRAIN: BRCA1
POSITION IN GENOME:
CHROMOSOME/SEGMENT: 17

MAP POSITION: 17q21
US-08-598-591-1

Query Match 100.0%; Score 201; DB 1; Length 5711;
Best Local Similarity 100.0%; Pred. No. 1.5e-95;
Matches 201; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 AGGCACAGCAGAAACCTCACTCATGAGAGTAAGAACCTGCACACTGAGAGCCAAAG 60
DB 2100 AGGCACAGCAGAAACCTCACTCATGAGAGTAAGAACCTGCACACTGAGAGCCAAAG 2159
OY 61 AGTACAGCCAAATGACAGACAGATTAAGACATGACATGATCTTCCAGAGCTG 120
DB 2160 AGTACAGCCAAATGACAGACAGATTAAGACATGACATGATCTTCCAGAGCTG 2219
OY 121 AAGTTACAAATGACAGCTGGTCTTTACTAAGTGTCAATACAGTGAATTAAGAA 180
DB 2220 AAGTTACAAATGACAGCTGGTCTTTACTAAGTGTCAATACAGTGAATTAAGAA 2279
OY 181 TTGTCAATCCTACCTTCCA 201
DB 2280 TTGTCAATCCTACCTTCCA 2300

RESULT 2

US-08-798-691-1
Sequence 1, Application US/08798691
Patent No. 5750400

GENERAL INFORMATION:

APPLICANT: Murphy, Patricia D.
APPLICANT: Allen, Antonette C.
APPLICANT: Alvares, Christopher P.
APPLICANT: Critz, Brenda S.
APPLICANT: Olson, Sheri J.
APPLICANT: Schelter, Denise B.
TITLE OF INVENTION: Coding Sequences of the Human
TITLE OF INVENTION: BRCAL Gene
NUMBER OF SEQUENCES: 72
CORRESPONDENCE ADDRESS:
ADDRESSEE: ONCORMED
STREET: 200 Perry Parkway
CITY: Galthersberg
STATE: MD
COUNTRY: USA
ZIP: 20877
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/798,691
FILING DATE: 12-Feb-97
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Thomas Gallegos
REGISTRATION NUMBER: 32,692
REFERENCE/DOCKET NUMBER: PA-0054CIP
TELECOMMUNICATION INFORMATION:
TELEPHONE: 301-527-2051
TELEFAX: 301-208-6997
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 5711 base pairs
TYPE: nucleic acid
STRANDEDNESS: not relevant
TOPOLOGY: linear
MOLECULE TYPE: cDNA
ORIGINAL SOURCE:
ORGANISM: Homo sapiens
STRAIN: BRCAL
POSITION IN GENOME:

CHROMOSOME/SEGMENT: 17
MAP POSITION: 17q21
US-08-798-691-1

Query Match 100.0%; Score 201; DB 1; Length 5711;
Best Local Similarity 100.0%; Pred. No. 1.5e-95;
Matches 201; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 AGGCACAGCAGAAACCTCACTCATGAGAGTAAGAACCTGCACACTGAGAGCCAAAG 60
DB 2100 AGGCACAGCAGAAACCTCACTCATGAGAGTAAGAACCTGCACACTGAGAGCCAAAG 2159
OY 61 AGTACAGCCAAATGACAGACAGATTAAGACATGACATGATCTTCCAGAGCTG 120
DB 2160 AGTACAGCCAAATGACAGACAGATTAAGACATGACATGATCTTCCAGAGCTG 2219
OY 121 AAGTTACAAATGACAGCTGGTCTTTACTAAGTGTCAATACAGTGAATTAAGAA 180
DB 2220 AAGTTACAAATGACAGCTGGTCTTTACTAAGTGTCAATACAGTGAATTAAGAA 2279
OY 181 TTGTCAATCCTACCTTCCA 201
DB 2280 TTGTCAATCCTACCTTCCA 2300

RESULT 3

US-08-798-691-5
Sequence 5, Application US/08798691
Patent No. 5750400

GENERAL INFORMATION:

APPLICANT: Murphy, Patricia D.
APPLICANT: Allen, Antonette C.
APPLICANT: Alvares, Christopher P.
APPLICANT: Critz, Brenda S.
APPLICANT: Olson, Sheri J.
APPLICANT: Schelter, Denise B.
TITLE OF INVENTION: Coding Sequences of the Human
TITLE OF INVENTION: BRCAL Gene
NUMBER OF SEQUENCES: 72
CORRESPONDENCE ADDRESS:
ADDRESSEE: ONCORMED
STREET: 200 Perry Parkway
CITY: Galthersberg
STATE: MD
COUNTRY: USA
ZIP: 20877
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/798,691
FILING DATE: 12-Feb-97
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Thomas Gallegos
REGISTRATION NUMBER: 32,692
REFERENCE/DOCKET NUMBER: PA-0054CIP
TELECOMMUNICATION INFORMATION:
TELEPHONE: 301-527-2051
TELEFAX: 301-208-6997
INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
LENGTH: 5711 base pairs
TYPE: nucleic acid
STRANDEDNESS: not relevant
TOPOLOGY: linear
MOLECULE TYPE: cDNA
ORIGINAL SOURCE:
ORGANISM: Homo sapiens
STRAIN: BRCAL

POSITION IN GENOME:
CHROMOSOME/SEGMENT: 17
MAP POSITION: 17q21
US-08-798-691-5

Query Match 100.0%; Score 201; DB 1; Length 5711;
Best Local Similarity 100.0%; Pred. No. 1.5e-95;
Matches 201; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 AGGCACACGAGAACTTCAACTCATGAGAGTAAGAAGCTGCACTGAGCCAAAG 60
DB 2100 AGGCACACGAGAACTTCAACTCATGAGAGTAAGAAGCTGCACTGAGCCAAAG 2159
QY 61 AGTACAGCCAAATGAGACAGAGTAAGAAGACATGACAGTACTTCCAGAGCTG 120
DB 2160 AGTACAGCCAAATGAGACAGAGTAAGAAGACATGACAGTACTTCCAGAGCTG 2219
QY 121 AAGTTAACAAATGACACCTGCTTTCTTACTAAGTGTCAATATACAGTGAATTAAGAA 180
DB 2220 AAGTTAACAAATGACACCTGCTTTCTTACTAAGTGTCAATATACAGTGAATTAAGAA 2279
QY 181 TTGTGCATCCTAGCCTTCCA 201
DB 2280 TTGTGCATCCTAGCCTTCCA 2300

RESULT 4

US-08-825-487A-1
Sequence 1, Application US/08825487A

Patent No. 6048689

GENERAL INFORMATION:

APPLICANT: Murphy, Patricia D.

TITLE OF INVENTION: METHODS FOR IDENTIFYING VARIATIONS IN POLYNUCLEOTIDE SEQUENCE

NUMBER OF SEQUENCES: 110

CORRESPONDENCE ADDRESS:

ADDRESSEE: Howrey & Simon

STREET: 1299 Pennsylvania Avenue., N.W.

CITY: Washington,

STATE: DC

COUNTRY: USA

ZIP: 20004

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

OPERATING SYSTEM: IBM PC compatible

SOFTWARE: Patentin Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/825,487A

FILING DATE: 28-MAR-1997

CLASSIFICATION: 435

PRIOR APPLICATION DATA:

APPLICATION NUMBER: PCT/US98/060002

FILING DATE: 26-Mar-1998

CLASSIFICATION: 435

ATTORNEY/AGENT INFORMATION:

NAME: Albert P. Halluin

REGISTRATION NUMBER: 25,227

REFERENCE/DOCKET NUMBER: 05371.0012.999

TELECOMMUNICATION INFORMATION:

TELEPHONE: 650-463-8100

TELEFAX: 650-463-8400

INFORMATION FOR SEQ ID NO: 1:

SEQUENCE CHARACTERISTICS:

LENGTH: 5711 base pairs

TYPE: nucleic acid

STRANDEDNESS: not relevant

TOPOLOGY: linear

MOLECULE TYPE: cDNA

ORGANISM: Homo sapiens

STRAIN: BRCAL

POSITION IN GENOME:

CHROMOSOME/SEGMENT: 17
MAP POSITION: 17q21
US-08-825-487A-1

Query Match 100.0%; Score 201; DB 3; Length 5711;
Best Local Similarity 100.0%; Pred. No. 1.5e-95;
Matches 201; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 AGGCACACGAGAACTTCAACTCATGAGAGTAAGAAGCTGCACTGAGCCAAAG 60
DB 2100 AGGCACACGAGAACTTCAACTCATGAGAGTAAGAAGCTGCACTGAGCCAAAG 2159
QY 61 AGTACAGCCAAATGAGACAGAGTAAGAAGACATGACAGTACTTCCAGAGCTG 120
DB 2160 AGTACAGCCAAATGAGACAGAGTAAGAAGACATGACAGTACTTCCAGAGCTG 2219
QY 121 AAGTTAACAAATGACACCTGCTTTCTTACTAAGTGTCAATATACAGTGAATTAAGAA 180
DB 2220 AAGTTAACAAATGACACCTGCTTTCTTACTAAGTGTCAATATACAGTGAATTAAGAA 2279
QY 181 TTGTGCATCCTAGCCTTCCA 201
DB 2280 TTGTGCATCCTAGCCTTCCA 2300

RESULT 5

US-08-825-487A-5
Sequence 5, Application US/08825487A

Patent No. 6048689

GENERAL INFORMATION:

APPLICANT: Murphy, Patricia D.

TITLE OF INVENTION: METHODS FOR IDENTIFYING VARIATIONS IN POLYNUCLEOTIDE SEQUE

NUMBER OF SEQUENCES: 110

CORRESPONDENCE ADDRESS:

ADDRESSEE: Howrey & Simon

STREET: 1299 Pennsylvania Avenue., N.W.

CITY: Washington,

STATE: DC

COUNTRY: USA

ZIP: 20004

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

OPERATING SYSTEM: IBM PC compatible

SOFTWARE: Patentin Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/825,487A

FILING DATE: 28-MAR-1997

CLASSIFICATION: 435

PRIOR APPLICATION DATA:

APPLICATION NUMBER: PCT/US98/060002

FILING DATE: 26-Mar-1998

CLASSIFICATION: 435

ATTORNEY/AGENT INFORMATION:

NAME: Albert P. Halluin

REGISTRATION NUMBER: 25,227

REFERENCE/DOCKET NUMBER: 05371.0012.999

TELECOMMUNICATION INFORMATION:

TELEPHONE: 650-463-8100

TELEFAX: 650-463-8400

INFORMATION FOR SEQ ID NO: 5:

SEQUENCE CHARACTERISTICS:

LENGTH: 5711 base pairs

TYPE: nucleic acid

STRANDEDNESS: not relevant

TOPOLOGY: linear

MOLECULE TYPE: cDNA

ORGANISM: Homo sapiens

STRAIN: BRCAL

POSITION IN GENOME:

CHROMOSOME/SEGMENT: 17

MAP POSITION: 17q21
US-08-825-487A-5

Query Match
Best Local Similarity 100.0%; Score 201; DB 3; Length 5711;
Pred. No. 1.5e-95;
Matches 201; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 AGGCACAGCAGAACTCACTCATGAGTAAGAACTGCAACTGAGCCAGAAG 60
DB 2100 AGGCACAGCAGAACTCACTCATGAGTAAGAACTGCAACTGAGCCAGAAG 2159
QY 61 AGTAAACAGCCAAATGAACAGACAACTGAAGTGAAGTCTTCCAGACTG 120
DB 2160 AGTAAACAGCCAAATGAACAGACAACTGAAGTGAAGTCTTCCAGACTG 2219
QY 121 AGTTAAACAAATGACCTGGTCTTTACTAAGTGTCAAAATACAGTGAAGTAAAGAA 180
DB 2220 AGTTAAACAAATGACCTGGTCTTTACTAAGTGTCAAAATACAGTGAAGTAAAGAA 2279
QY 181 TTGTCAATCCTAGCCTTCCA 201
DB 2280 TTGTCAATCCTAGCCTTCCA 2300

RESULT 6

US-09-074-476-1
Sequence 1, Application US/09074476
Patent No. 6130322

GENERAL INFORMATION:

APPLICANT: Murphy, Patricia D.
APPLICANT: Allen, Antoinette C.
APPLICANT: Alvares, Christopher P.
APPLICANT: Critz, Brenda S.
APPLICANT: Olson, Sheri J.
APPLICANT: Thurber, Denise
APPLICANT: Zeng, Bin
TITLE OF INVENTION: Coding Sequences of the Human
TITLE OF INVENTION: BRCA1 Gene
NUMBER OF SEQUENCES: 72
CORRESPONDENCE ADDRESS:
ADDRESSEE: Howrey & Simon
STREET: 1299 Pennsylvania Avenue N. W.
CITY: Washington
STATE: DC
COUNTRY: USA

COMPUTER READABLE FORM:

ZIP: 20004
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/074.476
FILING DATE:

CLASSIFICATION:

PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/074.453
FILING DATE:

ATTORNEY/AGENT INFORMATION:

NAME: Albert P. Halluin
REGISTRATION NUMBER: 25,227
REFERENCE/DOCKET NUMBER: 5371.34.US01
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-463-8109
TELEFAX: 650-463-8400
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 5711 base pairs
TYPE: nucleic acid
STRANDEDNESS: not relevant
TOPOLOGY: linear
MOLECULE TYPE: cDNA
ORIGINAL SOURCE:

ORGANISM: Homo sapiens
STRAIN: BRCA1 (om11)
POSITION IN GENOME:
CHROMOSOME/SEGMENT: 17
MAP POSITION: 17q21
US-09-074-476-1

Query Match
Best Local Similarity 100.0%; Score 201; DB 3; Length 5711;
Pred. No. 1.5e-95;
Matches 201; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 AGGCACAGCAGAACTCACTCATGAGTAAGAACTGCAACTGAGCCAGAAG 60
DB 2100 AGGCACAGCAGAACTCACTCATGAGTAAGAACTGCAACTGAGCCAGAAG 2159
QY 61 AGTAAACAGCCAAATGAACAGACAACTGAAGTGAAGTCTTCCAGACTG 120
DB 2160 AGTAAACAGCCAAATGAACAGACAACTGAAGTGAAGTCTTCCAGACTG 2219
QY 121 AGTTAAACAAATGACCTGGTCTTTACTAAGTGTCAAAATACAGTGAAGTAAAGAA 180
DB 2220 AGTTAAACAAATGACCTGGTCTTTACTAAGTGTCAAAATACAGTGAAGTAAAGAA 2279
QY 181 TTGTCAATCCTAGCCTTCCA 201
DB 2280 TTGTCAATCCTAGCCTTCCA 2300

RESULT 7

US-09-074-476-3
Sequence 3, Application US/09074476
Patent No. 6130322

GENERAL INFORMATION:

APPLICANT: Murphy, Patricia D.
APPLICANT: Allen, Antoinette C.
APPLICANT: Alvares, Christopher P.
APPLICANT: Critz, Brenda S.
APPLICANT: Olson, Sheri J.
APPLICANT: Thurber, Denise
APPLICANT: Zeng, Bin
TITLE OF INVENTION: Coding Sequences of the Human
TITLE OF INVENTION: BRCA1 Gene
NUMBER OF SEQUENCES: 72
CORRESPONDENCE ADDRESS:
ADDRESSEE: Howrey & Simon
STREET: 1299 Pennsylvania Avenue N. W.
CITY: Washington
STATE: DC
COUNTRY: USA

COMPUTER READABLE FORM:

ZIP: 20004
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/074.476
FILING DATE:

CLASSIFICATION:

PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/074.453
FILING DATE:

ATTORNEY/AGENT INFORMATION:

NAME: Albert P. Halluin
REGISTRATION NUMBER: 25,227
REFERENCE/DOCKET NUMBER: 5371.34.US01
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-463-8109
TELEFAX: 650-463-8400
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 5711 base pairs
TYPE: nucleic acid

STRANDEDNESS: not relevant
TOPOLOGY: linear
MOLECULE TYPE: cDNA
ORIGINAL SOURCE:
ORGANISM: Homo sapiens
STRAIN: BRCA1 (om12)
POSITION IN GENOME:
CHROMOSOME/SEGMENT: 17
MAP POSITION: 17q21
US-09-074-476-3

Query Match
Best Local Similarity 100.0%; Score 201; DB 3; Length 5711;
Pred. No. 1.5e-95;
Matches 201; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 AGGCACAGCAGAACTCTACACTCTGAGAGTAAAGAACTGCTGACCTGAGCCAGAG 60
DB 2100 AGGCACAGCAGAACTCTACACTCTGAGAGTAAAGAACTGCTGACCTGAGCCAGAG 2159
QY 61 AGTACAGCCAAATGAGACAGAGTAAGACATGACAGTACTTCCAGAGCTG 120
DB 2160 AGTACAGCCAAATGAGACAGAGTAAGACATGACAGTACTTCCAGAGCTG 2219
QY 121 AAGTTAACAAATGACACTGGTCTTTTACTAGTGTCAATATCCAGTGAATTAAAGA 180
DB 2220 AAGTTAACAAATGACACTGGTCTTTTACTAGTGTCAATATCCAGTGAATTAAAGA 2279
QY 181 TTGTCAATCCTAGCCTTCCA 201
DB 2280 TTGTCAATCCTAGCCTTCCA 2300

RESULT 8
US-08-480-784-21
Sequence 21, Application US/08480784
Patent No. 5693473
GENERAL INFORMATION:
APPLICANT: Skolnick, Mark H.
APPLICANT: Goldgar, David E.
APPLICANT: Miki, Yoshio
APPLICANT: Swenson, Jeff
APPLICANT: Kamb, Alexander
APPLICANT: Harshman, Keith D.
APPLICANT: Shattuck-Eidens, Donna M.
APPLICANT: Tavligian, Sean V.
APPLICANT: Wiseman, Roger W.
APPLICANT: Futreal, P. Andrew
TITLE OF INVENTION: 17q-Linked Breast and Ovarian Cancer
TITLE OF INVENTION: Susceptibility Gene
NUMBER OF SEQUENCES: 85
CORRESPONDENCE ADDRESS:
ADDRESSEE: Venable, Baetjer, Howard & Civiletti, LLP
STREET: 1201 New York Avenue, N.W., Suite 1000
CITY: Washington
STATE: DC
COUNTRY: USA
ZIP: 20005
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/480,784
FILING DATE:
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/409,305
FILING DATE: 24-MAR-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/348,824
FILING DATE: 29-NOV-1994
PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/308,104
FILING DATE: 16-SEP-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/300,266
FILING DATE: 02-SEP-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/289,221
FILING DATE: 12-AUG-1994
ATTORNEY/AGENT INFORMATION:
NAME: Innen, Jeffrey L.
REGISTRATION NUMBER: 28,957
REFERENCE/DOCKET NUMBER: 24884-109347
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-962-4810
TELEFAX: 202-962-8300
INFORMATION FOR SEQ ID NO: 21:
SEQUENCE CHARACTERISTICS:
LENGTH: 4249 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
HYPOTHETICAL: NO
ANTI-SENSE: NO
ORIGINAL SOURCE:
ORGANISM: Homo sapiens
US-08-480-784-21

Query Match
Best Local Similarity 74.6%; Score 150; DB 1; Length 4249;
Pred. No. 5.1e-69;
Matches 200; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 AGGCACAGCAGAACTCTACACTCTGAGAGTAAAGAACTGCTGACCTGAGCCAGAG 60
DB 1512 AGGCACAGCAGAACTCTACACTCTGAGAGTAAAGAACTGCTGACCTGAGCCAGAG 1571
QY 61 AGTACAGCCAAATGAGACAGAGTAAGACATGACAGTACTTCCAGAGCTG 120
DB 1572 AGTACAGCCAAATGAGACAGAGTAAGACATGACAGTACTTCCAGAGCTG 1631
QY 121 AAGTTAACAAATGACACTGGTCTTTTACTAGTGTCAATATCCAGTGAATTAAAGA 180
DB 1632 AAGTTAACAAATGACACTGGTCTTTTACTAGTGTCAATATCCAGTGAATTAAAGA 1691
QY 181 TTGTCAATCCTAGCCTTCCA 201
DB 1692 TTGTCAATCCTAGCCTTCCA 1712

RESULT 9
US-08-483-553-21
Sequence 21, Application US/08483553
Patent No. 5709999
GENERAL INFORMATION:
APPLICANT: Skolnick, Mark H.
APPLICANT: Goldgar, David E.
APPLICANT: Miki, Yoshio
APPLICANT: Swenson, Jeff
APPLICANT: Kamb, Alexander
APPLICANT: Harshman, Keith D.
APPLICANT: Shattuck-Eidens, Donna M.
APPLICANT: Tavligian, Sean V.
APPLICANT: Wiseman, Roger W.
APPLICANT: Futreal, P. Andrew
TITLE OF INVENTION: 17q-Linked Breast and Ovarian Cancer
TITLE OF INVENTION: Susceptibility Gene
NUMBER OF SEQUENCES: 85
CORRESPONDENCE ADDRESS:
ADDRESSEE: Venable, Baetjer, Howard & Civiletti, LLP
STREET: 1201 New York Avenue, N.W., Suite 1000
CITY: Washington
STATE: DC
COUNTRY: USA

ZIP: 20005
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/483,553
FILING DATE:
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/409,305
FILING DATE: 24-MAR-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/348,824
FILING DATE: 29-NOV-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/308,104
FILING DATE: 16-SEP-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/300,266
FILING DATE: 02-SEP-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/289,221
FILING DATE: 12-AUG-1994
ATTORNEY/AGENT INFORMATION:
NAME: Ihnen, Jeffrey L.
REGISTRATION NUMBER: 28,957
REFERENCE/DOCKET NUMBER: 24884-109347
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-962-4810
TELEFAX: 202-962-8300
INFORMATION FOR SEQ ID NO: 21:
SEQUENCE CHARACTERISTICS:
LENGTH: 4249 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
HYPOTHETICAL: NO
ANTI-SENSE: NO
ORIGINAL SOURCE:
ORGANISM: Homo sapiens
US-08-483-553-21

Query Match 74.6%; Score 150; DB 1; Length 4249;
Best Local Similarity 99.5%; Pred. No. 5,1e-69;
Matches 200; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1 AGGCACAGCAGAACTTCACTGAGGTAAGAACTGCACTGGAGCCAGAG 60
DB 1512 AGGCACAGCAGAACTTCACTGAGGTAAGAACTGCACTGGAGCCAGAG 1571
QY 61 AGTAACAAGCCAAATGAAGACAGCAAGTAAAGACATGACAGTCTTCCAGAGCTG 120
DB 1572 AGTAACAAGCCAAATGAAGACAGCAAGTAAAGACATGACAGTCTTCCAGAGCTG 1631
QY 121 AAGTTACAATGACACCTGGTCTTTACTAAGTGTCAATATACAGTGAATTAAGAA 180
DB 1632 AAGTTACAATGACACCTGGTCTTTACTAAGTGTCAATATACAGTGAATTAAGAA 1691
QY 181 TTTGTCAATCTAGCTTCCA 201
DB 1692 TTTGTCAATCTAGCTTCCA 1712
RESULT 10
US-08-487-002-21
Sequence 21, Application US/08487002
Patent No. 5710001
GENERAL INFORMATION:
APPLICANT: Shettuck-Eidens, Donna M.
APPLICANT: Simard, Jacques

APPLICANT: Eml, Mitsuru
APPLICANT: Nakamura, Yusuke
APPLICANT: Durocher, Francine
TITLE OF INVENTION: 17q-Linked Breast and Ovarian Cancer
TITLE OF INVENTION: Susceptibility Gene
NUMBER OF SEQUENCES: 85
CORRESPONDENCE ADDRESS:
ADDRESSEE: Venable, Baetjer, Howard & Civiletti, LLP
STREET: 1201 New York Avenue, N.W., Suite 1000
CITY: Washington
STATE: DC
COUNTRY: USA
ZIP: 20005
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/487,002
FILING DATE:
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/409,305
FILING DATE: 24-MAR-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/348,824
FILING DATE: 29-NOV-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/308,104
FILING DATE: 16-SEP-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/300,266
FILING DATE: 02-SEP-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/289,221
FILING DATE: 12-AUG-1994
ATTORNEY/AGENT INFORMATION:
NAME: Ihnen, Jeffrey L.
REGISTRATION NUMBER: 28,957
REFERENCE/DOCKET NUMBER: 24884-109347
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-962-4810
TELEFAX: 202-962-8300
INFORMATION FOR SEQ ID NO: 21:
SEQUENCE CHARACTERISTICS:
LENGTH: 4249 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
HYPOTHETICAL: NO
ANTI-SENSE: NO
ORIGINAL SOURCE:
ORGANISM: Homo sapiens
US-08-487-002-21

Query Match 74.6%; Score 150; DB 1; Length 4249;
Best Local Similarity 99.5%; Pred. No. 5,1e-69;
Matches 200; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 AGGCACAGCAGAACTTCACTGAGGTAAGAACTGCACTGGAGCCAGAG 60
DB 1512 AGGCACAGCAGAACTTCACTGAGGTAAGAACTGCACTGGAGCCAGAG 1571
QY 61 AGTAACAAGCCAAATGAAGACAGCAAGTAAAGACATGACAGTCTTCCAGAGCTG 120
DB 1572 AGTAACAAGCCAAATGAAGACAGCAAGTAAAGACATGACAGTCTTCCAGAGCTG 1631
QY 121 AAGTTACAATGACACCTGGTCTTTACTAAGTGTCAATATACAGTGAATTAAGAA 180
DB 1632 AAGTTACAATGACACCTGGTCTTTACTAAGTGTCAATATACAGTGAATTAAGAA 1691

OY 181 TTGTCAATCTAGCCTTCCA 201
Db 1692 TTGTCAATCTAGCCTTCCA 1712

RESULT 11
US-08-483-554B-21
Sequence 21, Application US/08483554B
Patent No. 5747282

GENERAL INFORMATION:
APPLICANT: Skolnick, Mark H.
APPLICANT: Goldgar, David E.
APPLICANT: Miki, Yoshio
APPLICANT: Swenson, Jeff
APPLICANT: Kamb, Alexander
APPLICANT: Harshman, Keith D.
APPLICANT: Shatluck-Eldens, Donna M.
APPLICANT: Tavligian, Sean V.
APPLICANT: Wiseman, Roger W.
APPLICANT: Futreal, P. Andrew

TITLE OF INVENTION: 17q-Linked Breast and Ovarian Cancer
TITLE OF INVENTION: Susceptibility Gene
NUMBER OF SEQUENCES: 85

CORRESPONDENCE ADDRESS:
ADDRESSEE: Venable, Baetjer, Howard & Civiletti, LLP
STREET: 1201 New York Avenue, N.W., Suite 1000
CITY: Washington
STATE: DC
COUNTRY: USA
ZIP: 20005

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30

CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/483,554B
FILING DATE: 07-JUN-1995
CLASSIFICATION: 514

PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/409,305
FILING DATE: 24-MAR-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/348,824
FILING DATE: 29-NOV-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/308,104
FILING DATE: 16-SEP-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/300,266
FILING DATE: 02-SEP-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/289,221
FILING DATE: 12-AUG-1994
ATTORNEY/AGENT INFORMATION:
NAME: Ihnen, Jeffrey L.
REGISTRATION NUMBER: 28,957
REFERENCE/DOCKET NUMBER: 24884-109347
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-962-4810
TELEFAX: 202-962-8300
INFORMATION FOR SEQ ID NO: 21:
SEQUENCE CHARACTERISTICS:
LENGTH: 4249 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
HYPOTHETICAL: NO
ANTI-SENSE: NO
ORIGINAL SOURCE:
ORGANISM: Homo sapiens
US-08-483-554B-21

Query Match 74.6%; Score 150; DB 1; Length 4249;
Best Local Similarity 99.5%; Pred. No. 5,1e-69;
Matches 200; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 1 AGGCACAGCAGAACTTACACTGTAAGTAAGTAAGCACTGCACTGAGCAGCAAG 60
Db 1512 AGGCACAGCAGAACTTACACTGTAAGTAAGTAAGCACTGCACTGAGCAGCAAG 1571

OY 61 AGTAACAGCCAAATGAGACAGACAGTAAGACATGACAGTATCTTCCAGAGCTG 120
Db 1572 AGTAACAGCCAAATGAGACAGACAGTAAGACATGACAGGATCTTCCAGAGCTG 1631

OY 121 AAGTTAACAAATGACCTGCTCTTTACTAGTGTGTCAAATACAGTAACCTTAAGAA 180
Db 1632 AAGTTAACAAATGACCTGCTCTTTACTAGTGTGTCAAATACAGTAACCTTAAGAA 1691

OY 181 TTGTCAATCTAGCCTTCCA 201
Db 1692 TTGTCAATCTAGCCTTCCA 1712

RESULT 12
US-08-488-011B-21
Sequence 21, Application US/08488011B
Patent No. 5753441

GENERAL INFORMATION:
APPLICANT: Skolnick, Mark H.
APPLICANT: Goldgar, David E.
APPLICANT: Miki, Yoshio
APPLICANT: Swenson, Jeff
APPLICANT: Kamb, Alexander
APPLICANT: Harshman, Keith D.
APPLICANT: Shatluck-Eldens, Donna M.
APPLICANT: Tavligian, Sean V.
APPLICANT: Wiseman, Roger W.
APPLICANT: Futreal, P. Andrew

TITLE OF INVENTION: 17q-Linked Breast and Ovarian Cancer
TITLE OF INVENTION: Susceptibility Gene
NUMBER OF SEQUENCES: 85

CORRESPONDENCE ADDRESS:
ADDRESSEE: Venable, Baetjer, Howard & Civiletti, LLP
STREET: 1201 New York Avenue, N.W., Suite 1000
CITY: Washington
STATE: DC
COUNTRY: USA
ZIP: 20005

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30

CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/488,011B
FILING DATE: 07-JUN-1995
CLASSIFICATION: 435

PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/409,305
FILING DATE: 24-MAR-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/308,104
FILING DATE: 16-SEP-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/300,266
FILING DATE: 02-SEP-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/289,221
FILING DATE: 12-AUG-1994
ATTORNEY/AGENT INFORMATION:
NAME: Ihnen, Jeffrey L.

REGISTRATION NUMBER: 28,957
REFERENCE/DOCKET NUMBER: 24884-109347-09
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-962-4810
TELEFAX: 202-962-8300
INFORMATION FOR SEQ ID NO: 21:
SEQUENCE CHARACTERISTICS:
LENGTH: 4249 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
HYPOTHETICAL: NO
ANTI-SENSE: NO
ORIGINAL SOURCE:
ORGANISM: Homo sapiens
US-08-488-011B-21

Query Match 74.6%; Score 150; DB 1; Length 4249;
Best Local Similarity 99.5%; Pred. No. 5.1e-69;
Matches 200; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 AGGCACAGCAGAACTACACTCATGTGAGGTAAAGAACCTGCACAGCCAGCAAG 60
DB 1512 AGGCACAGCAGAACTACACTCATGTGAGGTAAAGAACCTGCACAGCCAGCAAG 1571
QY 61 AGTAAACAAGCCAAATGAGACAGACAGTAAGACATGACATGATCTTCCAGAGCTG 120
DB 1572 AGTAAACAAGCCAAATGAGACAGACAGTAAGACATGACATGATCTTCCAGAGCTG 1631
QY 121 AAGTTACAATGACACCTGGTCTTTTACTAAGTGTCAATACAGAGACTTAAGAA 180
DB 1632 AAGTTACAATGACACCTGGTCTTTTACTAAGTGTCAATACAGAGACTTAAGAA 1691
QY 181 TTGTCAATCCTACGCTTCCA 201
DB 1692 TTGTCAATCCTACGCTTCCA 1712

RESULT 13
US-08-850-727-21
Sequence 21, Application US/08850727
Patent No. 6162897
GENERAL INFORMATION:
APPLICANT: Skolnick, Mark H.
APPLICANT: Goldgar, David E.
APPLICANT: Miki, Yoshio
APPLICANT: Swenson, Jeff
APPLICANT: Kamb, Alexander
APPLICANT: Harshman, Keith D.
APPLICANT: Shattuck-Eidens, Donna M.
APPLICANT: Tavitgian, Sean V.
APPLICANT: Wiseman, Roger W.
APPLICANT: Futreal, P. Andrew
TITLE OF INVENTION: 17q-Linked Breast and Ovarian Cancer
TITLE OF INVENTION: Susceptibility Gene
NUMBER OF SEQUENCES: 85
CORRESPONDENCE ADDRESS:
ADDRESSEE: Venable, Baetjer, Howard & Civiletti, LLP
STREET: 1201 New York Avenue, N.W., Suite 1000
CITY: Washington
STATE: DC
COUNTRY: USA
ZIP: 20005
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/850,727
FILING DATE:
CLASSIFICATION:

PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/483,554
FILING DATE: 07-JUN-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/348,824
FILING DATE: 29-NOV-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/308,104
FILING DATE: 16-SEP-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/300,266
FILING DATE: 02-SEP-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/289,221
FILING DATE: 12-AUG-1994
ATTORNEY/AGENT INFORMATION:
NAME: Ihnen, Jeffrey L.
REGISTRATION NUMBER: 28,957
REFERENCE/DOCKET NUMBER: 24884-109347
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-962-4810
TELEFAX: 202-962-8300
INFORMATION FOR SEQ ID NO: 21:
SEQUENCE CHARACTERISTICS:
LENGTH: 4249 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
HYPOTHETICAL: NO
ANTI-SENSE: NO
ORIGINAL SOURCE:
ORGANISM: Homo sapiens
US-08-850-727-21

Query Match 74.6%; Score 150; DB 4; Length 4249;
Best Local Similarity 99.5%; Pred. No. 5.1e-69;
Matches 200; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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DB 1512 AGGCACAGCAGAACTACACTCATGTGAGGTAAAGAACCTGCACAGCCAGCAAG 1571
QY 61 AGTAAACAAGCCAAATGAGACAGACAGTAAGACATGACATGATCTTCCAGAGCTG 120
DB 1572 AGTAAACAAGCCAAATGAGACAGACAGTAAGACATGACATGATCTTCCAGAGCTG 1631
QY 121 AAGTTACAATGACACCTGGTCTTTTACTAAGTGTCAATACAGAGACTTAAGAA 180
DB 1632 AAGTTACAATGACACCTGGTCTTTTACTAAGTGTCAATACAGAGACTTAAGAA 1691
QY 181 TTGTCAATCCTACGCTTCCA 201
DB 1692 TTGTCAATCCTACGCTTCCA 1712

RESULT 14
PCT-US95-10202-21
Sequence 21, Application PC/TUS9510202
GENERAL INFORMATION:
APPLICANT: Shattuck-Eidens, Donna M.
APPLICANT: Simard, Jacques
APPLICANT: Eml, Mitsuru
APPLICANT: Nakamura, Yusuke
APPLICANT: Durocher, Francine
TITLE OF INVENTION: In Vivo Mutations and Polymorphisms
TITLE OF INVENTION: in the 17q-Linked Breast and Ovarian Cancer
TITLE OF INVENTION: Susceptibility Gene
NUMBER OF SEQUENCES: 85
CORRESPONDENCE ADDRESS:
ADDRESSEE: Venable, Baetjer, Howard & Civiletti, LLP
STREET: 1201 New York Avenue, N.W., Suite 1000
CITY: Washington

STATE: DC
COUNTRY: USA
ZIP: 20005
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US95/10202
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US
FILING DATE: 07-JUN-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/409,305
FILING DATE: 24-MAR-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/348,824
FILING DATE: 29-NOV-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08-308,104
FILING DATE: 16-SEP-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/300,266
FILING DATE: 02-SEP-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/289,221
FILING DATE: 12-AUG-1994
ATTORNEY/AGENT INFORMATION:
NAME: Ihnen, Jeffrey L.
REGISTRATION NUMBER: 28,957
REFERENCE/DOCKET NUMBER: 24884-109347
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-962-4810
TELEFAX: 202-962-8300
INFORMATION FOR SEQ ID NO: 21:
SEQUENCE CHARACTERISTICS:
LENGTH: 4249 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
HYPOTHETICAL: NO
ANTI-SENSE: NO
ORIGINAL SOURCE:
ORGANISM: Homo sapiens
PCT-US95-10202-21

Query Match 74.6%; Score 150; DB 5; Length 4249;
Best Local Similarity 99.5%; Pred. No. 5,1e-69;
Matches 200; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1 AGGCACAGCAAACTACATGAGTAAAGACCTGCACTGGAGCCAAAG 60
DB 1512 AGGCACAGCAAACTACATGAGTAAAGACCTGCACTGGAGCCAAAG 1571
QY 61 AGTACAGCCAAATGACAGACAGTAAAGACATGACAGTACTTTCCAGAGCTG 120
DB 1572 AGTACAGCCAAATGACAGACAGTAAAGACATGACAGTACTTTCCAGAGCTG 1631
QY 121 AAGTACAAATGACCTGTTCTTTACTAAGTGTCAATATACATGAACTTAAGAA 180
DB 1632 AAGTACAAATGACCTGTTCTTTACTAAGTGTCAATATACATGAACTTAAGAA 1691
QY 181 TTGTCAATCTAGCCTTCCA 201
DB 1692 TTGTCAATCTAGCCTTCCA 1712
RESULT 15
PCT-US95-10203-21

Sequence 21, Application PC/TUS9510203
GENERAL INFORMATION:
APPLICANT: Skolnick, Mark H.
APPLICANT: Colgar, David E.
APPLICANT: Miki, Yoshio
APPLICANT: Swenson, Jeff
APPLICANT: Kamp, Alexander
APPLICANT: Harsman, Keith D.
APPLICANT: Shattuck-Eidens, Donna M.
APPLICANT: Tavligian, Sean V.
APPLICANT: Wiseman, Roger W.
TITLE OF INVENTION: 17q-Linked Breast and Ovarian Cancer
TITLE OF INVENTION: Susceptibility Gene
NUMBER OF SEQUENCES: 85
CORRESPONDENCE ADDRESS:
ADDRESSEE: Venable, Baetjer, Howard & Civiletti, LLP
STREET: 1201 New York Avenue, N.W., Suite 1000
CITY: Washington
STATE: DC
COUNTRY: USA
ZIP: 20005
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US95/10203
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US
FILING DATE: 07-JUN-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/409,305
FILING DATE: 24-MAR-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/348,824
FILING DATE: 29-NOV-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08-308,104
FILING DATE: 16-SEP-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/300,266
FILING DATE: 02-SEP-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/289,221
FILING DATE: 12-AUG-1994
ATTORNEY/AGENT INFORMATION:
NAME: Ihnen, Jeffrey L.
REGISTRATION NUMBER: 28,957
REFERENCE/DOCKET NUMBER: 24884-109347
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-962-4810
TELEFAX: 202-962-8300
INFORMATION FOR SEQ ID NO: 21:
SEQUENCE CHARACTERISTICS:
LENGTH: 4249 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
HYPOTHETICAL: NO
ANTI-SENSE: NO
ORIGINAL SOURCE:
ORGANISM: Homo sapiens
PCT-US95-10203-21
Query Match 74.6%; Score 150; DB 5; Length 4249;
Best Local Similarity 99.5%; Pred. No. 5,1e-69;
Matches 200; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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Db      1512 AGGCACAGCAGAAACCTACAACTCATGGAAGGTAAAGAACCTGCAACTGAGGCCAAGAAG 1571
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Db      1572 AGTACACAGCCAAATGAAACAGACAGTAAAGACATGACAGTGAATCTTCCAGAGCTG 1631
      |||
QY      121 AAGTTACAATGACCTGCTTCTTTACTAAGTGTCAAAATACCAGTGAAGCTTAAGAA 180
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Db      1632 AAGTTACAATGACCTGCTTCTTTACTAAGTGTCAAAATACCAGTGAAGCTTAAGAA 1691
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QY      181 TTTGTCAATCCTAGCCTTCCA 201
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Db      1692 TTTGTCAATCCTAGCCTTCCA 1712
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Job time : 41 secs

GenCore version 5.1.6
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OM nucleic - nucleic search, using sw model

Run on: June 27, 2003, 17:30:39 ; Search time 267.58 Seconds

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Title: US-09-734-672-3_COPY_120_5708

Perfect score: 5589

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Scoring table: IDENTITY_NUC

Gapop 10.0 , Gapext 1.0

Searched: 441362 seqs, 153338381 residues

Total number of hits satisfying chosen parameters: 882724

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

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6: /cgn2_6/ptodata/2/ina/backfiles1.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
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4	5585.8	99.9	5711	2	US-08-658-322-1
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6	5585.8	99.9	5712	3	US-09-099-753-1
7	5585.8	99.9	5712	4	US-08-986-108-1
8	5585.8	99.9	5712	4	US-09-007-678B-47
9	5585.8	99.9	5914	1	US-08-480-784-1
10	5585.8	99.9	5914	1	US-08-483-553-1
11	5585.8	99.9	5914	1	US-08-487-002-1
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14	5585.8	99.9	5914	1	US-08-488-011B-1
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16	5585.8	99.9	5914	5	PCF-US95-10202-1
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22	5584.2	99.9	5711	1	US-08-825-886-10
23	5582.6	99.9	5711	1	US-08-798-691-5
24	5582.6	99.9	5711	3	US-08-825-487A-5
25	5581.6	99.9	5711	3	US-09-074-476-3
26	5581.6	99.9	5711	1	US-08-598-591-1
27	5581.6	99.9	5711	3	US-08-798-691-1

28	5581.6	99.9	5711	3	US-09-074-476-1	Sequence 1, Appl
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33	5571.8	99.7	5709	1	US-08-425-061-2	Sequence 2, Appl
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35	5571.8	99.7	5709	1	US-08-425-061-8	Sequence 8, Appl
36	5571.8	99.7	5709	1	US-08-425-061-9	Sequence 9, Appl
37	5571.8	99.7	5709	1	US-08-825-886-2	Sequence 2, Appl
38	5571.8	99.7	5709	1	US-08-825-886-7	Sequence 7, Appl
39	5571.8	99.7	5709	1	US-08-825-886-8	Sequence 8, Appl
40	5571.8	99.7	5709	1	US-08-825-886-9	Sequence 9, Appl
41	5567.8	99.6	5707	1	US-08-425-061-11	Sequence 11, Appl
42	5567.8	99.6	5707	1	US-08-825-886-11	Sequence 11, Appl
43	5531.8	99.0	5689	1	US-08-425-061-3	Sequence 3, Appl
44	5531.8	99.0	5689	1	US-08-825-886-3	Sequence 3, Appl
45	5505.6	98.5	5770	1	US-08-425-061-5	Sequence 5, Appl

ALIGNMENTS

RESULT 1
US-08-798-691-3
Sequence 3, Application US/08798691
Patent No. 5750400
GENERAL INFORMATION:
APPLICANT: Murphy, Patricia D.
APPLICANT: Allen, Antonette C.
APPLICANT: Alvarez, Christopher P.
APPLICANT: Citz, Brenda S.
APPLICANT: Olson, Sheri J.
APPLICANT: Schelter, Denise B.
APPLICANT: Zeng, Bin
TITLE OF INVENTION: Coding Sequences of the Human
NUMBER OF SEQUENCES: 72
CORRESPONDENCE ADDRESS:
ADDRESSEE: ONCORMED
STREET: 200 Perry Parkway
CITY: Galtersberg
STATE: MD
COUNTRY: USA
ZIP: 20877
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/798,691
FILING DATE: 12-Feb-97
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Thomas Gallegos
REGISTRATION NUMBER: 32,692
REFERENCE/DOCKET NUMBER: PA-0054C1P
TELECOMMUNICATION INFORMATION:
TELEPHONE: 301-527-2051
TELEFAX: 301-208-6997
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 5711 base pairs
TYPE: nucleic acid
STRANDEDNESS: not relevant
TOPOLOGY: linear
MOLECULE TYPE: cDNA
ORIGINAL SOURCE:
ORGANISM: Homo sapiens
STRAIN: BRCAL
POSITION IN GENOME:
CHROMOSOME/SEGMENT: 17

MAP POSITION: 17q21
US-08-798-691-3

Query Match 100.0%; Score 5587.4; DB 1; Length 5711;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 5588; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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QY 1 ATGATTTATCTGCTCTTCCGCTTGAAGAATACAAAATGCTAATGCTATGACAAA 60
DB 120 ATGATTTATCTGCTCTTCCGCTTGAAGAATACAAAATGCTAATGCTATGACAAA 179
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DB 180 ATCTTAGAGTGTCCCATCTGTCTGAGTTGATCAGAAACCTGTCTCCAAAGTGTGAC 239
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RESULT 2

US-08-825-487A-3

Sequence 3, Application US/08825487A

Patent No. 6048689

GENERAL INFORMATION:

APPLICANT: Murphy, Patricia D.

APPLICANT: White, Marga B.

TITLE OF INVENTION: METHODS FOR IDENTIFYING VARIATIONS IN POLYNUCLEOTIDE SEQUE

NUMBER OF SEQUENCES: 110

CORRESPONDENCE ADDRESS:

ADDRESSEE: Howrey & Simon

STREET: 1299 Pennsylvania Avenue., N.W.

CITY: Washington,

STATE: DC

COUNTRY: USA

ZIP: 20004

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/825,487A

FILING DATE: 28-MAR-1997

CLASSIFICATION: 435

PRIOR APPLICATION DATA:

APPLICATION NUMBER: PCT/US98/060002

FILING DATE: 26-Mar-1998

CLASSIFICATION: 435

ATTORNEY/AGENT INFORMATION:

NAME: Albert P. Halluin

REGISTRATION NUMBER: 25,227

REFERENCE/DOCKET NUMBER: 05371.0012.999

TELECOMMUNICATION INFORMATION:

TELEPHONE: 650-463-8100

TELEFAX: 650-463-8400

INFORMATION FOR SEQ ID NO: 3:

SEQUENCE CHARACTERISTICS:

LENGTH: 5711 base pairs

TYPE: nucleic acid

STRANDEDNESS: not relevant

TOPOLOGY: linear

MOLECULE TYPE: cDNA

ORIGINAL SOURCE:

ORGANISM: Homo sapiens

STRAIN: BRCA1

POSITION IN GENOME:

CHROMOSOME/SEGMENT: 17

MAP POSITION: 17q21

US-08-825-487A-3

Query Match 100.0%; Score 5587.4; DB 3; Length 5711;
 Best Local Similarity 100.0%; Pctd. No. 0;
 Matches 5588; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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Db	180	ATCTTAGAGTGTCCCATCTGCTGTGGAGTTGATCAAGAAAGCTGTCTCCAAAGGTGAC	239
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Db	1920	CACAAATCAAAAGCACCTTAATAAGAGATAGGCTGAGAGAGAGTCTTACCAGGCATATT	1979
QY	1861	CATGGCGTTGAACATAGTAGTCAGTAGTAATCTAAGCCCACTAATTTGACGAAATTCGAA	1920
Db	1980	CATGGCGTTGAACATAGTAGTCAGTAGTAATCTAAGCCCACTAATTTGACGAAATTCGAA	2039
QY	1921	ATTGATAGTATTCTTACAGCAGTAGAGAGATTAAGAAAAAAAGTACAACCAATGCCAGTC	1980
Db	2040	ATTGATAGTATTCTTACAGCAGTAGAGAGATTAAGAAAAAAAGTACAACCAATGCCAGTC	2099
QY	1981	AGGCACAGCAAAACCTTACAATCATGTAGAGGTAAGAAACCTGCAACTGAGACCAAGAG	2040
Db	2100	AGGCACAGCAAAACCTTACAATCATGTAGAGGTAAGAAACCTGCAACTGAGACCAAGAG	2159
QY	2041	AGTAAACAAGCCAAATGAAACAACAAGTAAAGACATGACAGTGTACTTTCCAGACACTG	2100
Db	2160	AGTAAACAAGCCAAATGAAACAACAAGTAAAGACATGACAGTGTACTTTCCAGACACTG	2219
QY	2101	AAGTTAAACAATGCACTGCTCTCTTTTACTAAGTGTCCAATTACCAGTGAACCTTAAGAA	2160
Db	2220	AAGTTAAACAATGCACTGCTCTCTTTTACTAAGTGTCCAATTACCAGTGAACCTTAAGAA	2279
QY	2161	TTTGTCAATCCTAGCCTTCCAAGAGAGAAAAAGAGAAACTAGAAACGATTAAAGTG	2220

Db	2280	TTTGCAATCCTAGACCTTCCAGAGAGAGAAAAGAACTGAAACAGTTAAAGTG	2333
QY	2221	TCTAATAATGCTGAAGACCCCAAGATCTCATGTTAAAGTGAAGAAAGGTTTTGCCAACT	2286
Db	2340	TCTAATAATGCTGAAGACCCCAAGATCTCATGTTAAAGTGAAGAAAGGTTTTGCCAACT	2339
QY	2281	GAAATATCTGTAGAGAGTAGAGAGTATTTTCATTGGTACTGGTACTGATTTATGGCACTAG	2340
Db	2400	GAAATATCTGTAGAGAGTAGAGAGTATTTTCATTGGTACTGGTACTGATTTATGGCACTAG	2455
QY	2341	GAAATATCTCTGTACTGGAAGTTAGCACTAGAGGAAGGCAAAAACAGAACCAATATAA	2400
Db	2460	GAAATATCTCTGTACTGGAAGTTAGCACTAGAGGAAGGCAAAAACAGAACCAATATAA	2519
QY	2401	TGTGTAGTCAAGTGTGCGAGCATTTTAAAAACCCAGGCACTAATTCATGTTGTCCAAA	2466
Db	2520	TGTGTAGTCAAGTGTGCGAGCATTTTAAAAACCCAGGCACTAATTCATGTTGTCCAAA	2579
QY	2461	GATAATAGAAAATGACACAGAAAGGCTTAAAGTTCATTGGGACATGAAGTTAACCAAGT	2520
Db	2580	GATAATAGAAAATGACACAGAAAGGCTTAAAGTTCATTGGGACATGAAGTTAACCAAGT	2639
QY	2521	CGGGAACACAGCATGGAATGGAAGAAAGTGAACCTGATGCTCAGATTTTGCAGATACA	2580
Db	2640	CGGGAACACAGCATGGAATGGAAGAAAGTGAACCTGATGCTCAGATTTTGCAGATACA	2699
QY	2581	TTCAAGGTTTCAAGCGCCAGCATTTTGCTGTTTCAAAATCCAGAAATGCACAAAG	2640
Db	2700	TTCAAGGTTTCAAGCGCCAGCATTTTGCTGTTTCAAAATCCAGAAATGCACAAAG	2755
QY	2641	GAATGTGCAACATTTCTCTGCCCCACTCTGGGTCCTTAAAGAAACAAAGTCCAAAGTCACT	2700
Db	2760	GAATGTGCAACATTTCTCTGCCCCACTCTGGGTCCTTAAAGAAACAAAGTCCAAAGTCACT	2819
QY	2701	TTTGAATGTGAACAAAGGAAGAAATGAAGAAAGATGAGTCAATATATCAAGCTCTGA	2760
Db	2820	TTTGAATGTGAACAAAGGAAGAAATGAAGAAAGATGAGTCAATATATCAAGCTCTGA	2879
QY	2761	CAGACAGTTAATATCATCTGACAGGCTTTCCTGTGTGTGTCAGAAAGATTAAGCCAGTTAT	2820
Db	2880	CAGACAGTTAATATCATCTGACAGGCTTTCCTGTGTGTGTCAGAAAGATTAAGCCAGTTAT	2939
QY	2821	AATGCCAATGTAGTATCAAGAGAGGCTCTAGGTTTTGTCTATCATCTCAGTTCCAGAGCC	2880
Db	2940	AATGCCAATGTAGTATCAAGAGAGGCTCTAGGTTTTGTCTATCATCTCAGTTCCAGAGCC	2999
QY	2881	AACGAACATGCACTATTACTGCCAATTAACATGTGACCTTTTACAAACCCATATGTATTA	2940
Db	3000	AACGAACATGCACTATTACTGCCAATTAACATGTGACCTTTTACAAACCCATATGTATTA	3055
QY	2941	CCACCAGTTTTCCTCATCAGTCAATTTGTTAAACTAAATGTAGAAAAATCTGCTAGAG	3000
Db	3060	CCACCAGTTTTCCTCATCAGTCAATTTGTTAAACTAAATGTAGAAAAATCTGCTAGAG	3119
QY	3001	GAAAACTTTGAGGAACATTCATATGTCACCTGGAAGAAAGGGAATGAGAACATTTCCA	3060
Db	3120	GAAAACTTTGAGGAACATTCATATGTCACCTGGAAGAAAGGGAATGAGAACATTTCCA	3179
QY	3061	AGTACAGTGAAGCAATTAAGCCGTATTAACATTTAGAGAAAATGTTTTTAAAGAACCCAGC	3120
Db	3180	AGTACAGTGAAGCAATTAAGCCGTATTAACATTTAGAGAAAATGTTTTTAAAGAACCCAGC	3239
QY	3121	TCAAGCAATATTAATGAAGTAGGTTCCAGTACTAATGAAGTGGCTCCAGATTTATGAA	3180
Db	3240	TCAAGCAATATTAATGAAGTAGGTTCCAGTACTAATGAAGTGGCTCCAGATTTATGAA	3299
QY	3181	ATAGGTTCCAGATGAGAAACCTTAAACAGAACTAGTAGAAACAGAGGCGCAAAATTG	3240
Db	3300	ATAGGTTCCAGATGAGAAACCTTAAACAGAACTAGTAGAAACAGAGGCGCAAAATTG	3355
QY	3241	AATGCTATGCTTAGATTAGGGGTTTTGCAACCTGAAGTCTATTAACAAAGTCTTCTGGA	3300

Db	3360	AATGCTACTGCTTAGATAGTAGGGTTTGGCACTGAGGCTCTAATAAACAAGCTTCCTGGA	3411
Qy	3301	AGTAATGTGAGCATCTCGTAATATAAAAAGCAAGATATGAAGAAGTACTGACACTGT	3360
Db	3420	ACTAATTTGTAACCATCTCGTAATATAAAAAGCAAGATATGAAGAAGTACTGACACTGT	3479
Qy	3361	AATACAGATTCTCTCCATATCTGATTTACAGTAACTTAAGAACACCTATGGGAAGTGT	3420
Db	3480	AATACAGATTCTCTCCATATCTGATTTACAGTAACTTAAGAACACCTATGGGAAGTGT	3539
Qy	3421	CATGCATCTCAGGTTTGTCTGAGACACCTGATGACCTTTAGATGATGGTAATAAG	3480
Db	3540	CATGCATCTCAGGTTTGTCTGAGACACCTGATGACCTTTAGATGATGGTAATAAG	3599
Qy	3481	GAAAGTACAGATTGTTGCTGAANAATACATTTAGAAAGTTGCTGTTTTAGCAAAAGC	3540
Db	3600	GAAAGTACAGATTGTTGCTGAANAATACATTTAGAAAGTTGCTGTTTTAGCAAAAGC	3659
Qy	3541	GTCCAGAAAGAGAGCTTAGCAGAGAGTCCCTACCCCTTCACCCATACATTTGGCTCAG	3600
Db	3660	GTCCAGAAAGAGAGCTTAGCAGAGAGTCCCTACCCCTTCACCCATACATTTGGCTCAG	3719
Qy	3601	GGTTACCCGAAGGGGGCCAAAGAAATTAAGTCCCTGAGAAAGAACTTTATCTAGAGAGAT	3660
Db	3720	GGTTACCCGAAGGGGGCCAAAGAAATTAAGTCCCTGAGAAAGAACTTTATCTAGAGAGAT	3779
Qy	3661	GAGAGAGCTCCCTGCTCCACACCTTGTATTGTGTTAAAGTAAACAAATATACCTTCACAG	3720
Db	3780	GAGAGAGCTCCCTGCTCCACACCTTGTATTGTGTTAAAGTAAACAAATATACCTTCACAG	3839
Qy	3721	TCTACTAGGCATAGCACCGTGTCTTCCGAGTCTCTGTAAAGACACAGAGAGAAATTTA	3780
Db	3840	TCTACTAGGCATAGCACCGTGTCTTCCGAGTCTCTGTAAAGACACAGAGAGAAATTTA	3899
Qy	3781	TTATCATTTGAATAATAGCTTAATATACAGCAGTAAACAGATTAATTTGGCAAGGACATCT	3840
Db	3900	TTATCATTTGAATAATAGCTTAATATACAGTAAATACAGTAAATTTGGCAAGGACATCT	3959
Qy	3841	CAGGAACATCACCTTAGTAGAGAAACAATAATGTTGCTAGCTGTTTTCTTCACAGTGC	3900
Db	3960	CAGGAACATCACCTTAGTAGAGAAACAATAATGTTGCTAGCTGTTTTCTTCACAGTGC	4019
Qy	3901	AATGATTTGGAAGACTTTCAGTCCAAATTAACAAACACCGAGATCCCTTCTATATGGTCT	3960
Db	4020	AATGATTTGGAAGACTTTCAGTCCAAATTAACAAACACCGAGATCCCTTCTATATGGTCT	4079
Qy	3961	TCCAAACAATATGAGGCATCAGTCTCAAAAGCCAGGAGTGTGCTGAGTACAAAGAAATTG	4020
Db	4080	TCCAAACAATATGAGGCATCAGTCTCAAAAGCCAGGAGTGTGCTGAGTACAAAGAAATTG	4139
Qy	4021	GTTTCAGATGATGAAGAAAGAGAAACGGGCTTGGAAAGAAATATCAAGAAAGACAAAGC	4080
Db	4140	GTTTCAGATGATGAAGAAAGAGAAACGGGCTTGGAAAGAAATATCAAGAAAGACAAAGC	4199
Qy	4081	ATGAGATTCAAACTTAGGTGAAGACACATCTGGGTGTGAGAGTGAAGAAACAAGGCTCTGAA	4140
Db	4200	ATGAGATTCAAACTTAGGTGAAGACACATCTGGGTGTGAGAGTGAAGAAACAAGGCTCTGAA	4259
Qy	4141	GACTGCTCAGGGCTATCCTCTCAGAGTACATTTTAACCTCAGACAGAGGATATCCATG	4200
Db	4260	GACTGCTCAGGGCTATCCTCTCAGAGTACATTTTAACCTCAGACAGAGGATATCCATG	4319
Qy	4201	CAACATTAACCTGATTAAGCTCCAGAGGAANTGGCTGAACATTAAGAAAGCTGTATGAACAG	4260
Db	4320	CAACATTAACCTGATTAAGCTCCAGAGGAANTGGCTGAACATTAAGAAAGCTGTATGAACAG	4379
Qy	4261	CATGGAGACCAGCCTTCTTAACAGTACCTTTCATCATTAAGTGACTTCTCGCCCTTGAG	4320
Db	4380	CATGGAGACCAGCCTTCTTAACAGTACCTTTCATCATTAAGTGACTTCTCGCCCTTGAG	4439
Qy	4321	GACCTGCAAAATCCAGAAACAACACATCAGAAAAAGCAGTATTAATCTTCACAGAAAAGT	4380
Db	4440	GACCTGCAAAATCCAGAAACAACACATCAGAAAAAGCAGTATTAATCTTCACAGAAAAGT	4499

QY 1 ATGATTTATCTGCTCTTCGGCTTGAAGAGTACAAAATGCTTATATCTTATGCGAGAA 60
Db 120 ATGGATTTATCTGCTCTTCGGCTTGAAGAGTACAAAATGCTTATATGCTTATGCGAGAA 179
QY 61 ATCTTAGAGTGTCCCATCTGCTGTGAGATTGATCAAGAAAGCTGTCCCAAGTGTGAC 120
Db 180 ATCTTAGAGTGTCCCATCTGCTGTGAGATTGATCAAGAAAGCTGTCTCCCAAGTGTGAC 239
QY 121 CACATATTTTGCATAATTTTGCATGCTGAAACTTTCACACAGAGAAAGGCGCTTCACAG 180
Db 240 CACATATTTTGCATAATTTTGCATGCTGAAACTTTCACACAGAGAAAGGCGCTTCACAG 299
QY 181 TGTCTTTATATGTAAGATATGATATACCAAAAGAGCTTACAAAGAAATGCGATTTACT 240
Db 300 TGTCTTTATATGTAAGATATGATATACCAAAAGAGCTTACAAAGAAATGCGATTTACT 359
QY 241 CACCTGTTGAAGAGCTATGTAATTCATTTTGTGCTTTTACCTTGACACAGATTTGAG 300
Db 360 CACCTGTTGAAGAGCTATGTAATTCATTTTGTGCTTTTACCTTGACACAGATTTGAG 419
QY 301 TATGCAAAACAGCTATATATTTTGCATAAAAGAAATTAATCTCTCTGAACATCTAAAGAT 360
Db 420 TATGCAAAACAGCTATATATTTTGCATAAAAGAAATTAATCTCTCTGAACATCTAAAGAT 479
QY 361 GAAATTTCTATCATCCCAAGATATGGGCTACAGAAACCGTCCCAAGAGCTTCTACAGAT 420
Db 480 GAAATTTCTATCATCCCAAGATATGGGCTACAGAAACCGTCCCAAGAGCTTCTACAGAT 539
QY 421 GAACCCGAAATTCCTCTCTGAGGAAACAGCTCAGTGTCACTCTCTAACTTGA 480
Db 540 GAACCCGAAATTCCTCTCTGAGGAAACAGCTCAGTGTCACTCTCTAACTTGA 599
QY 481 ACTGTGAGAACTGTGAGAGCAAAAGCAGGATACAACTCAAAAGAGCTGTCTACAT 540
Db 600 ACTGTGAGAACTGTGAGAGCAAAAGCAGGATACAACTCAAAAGAGCTGTCTACAT 659
QY 541 GAAATTTGATGATCTCTCTGAGAGATACCGTTATTAAGGCACTTATGCGAGTGTGGA 600
Db 660 GAAATTTGATGATCTCTCTGAGAGATACCGTTATTAAGGCACTTATGCGAGTGTGGA 719
QY 601 GATCAAGAAATTTGTAACAATCAACCCCTCAAGAACAGGATGAATCAATGTTGATCT 660
Db 720 GATCAAGAAATTTGTAACAATCAACCCCTCAAGAACAGGATGAATCAATGTTGATCT 779
QY 661 GCAAAAAAGCTGCTTGTGAATTTTCTGAGAGCGATGTAAACAATTAAGTCAATCATCA 720
Db 780 GCAAAAAAGCTGCTTGTGAATTTTCTGAGAGCGATGTAAACAATTAAGTCAATCATCA 839
QY 721 CCCAGTATATGATTTGAACACACACAGTGAAGAGCTGAGAGAGCATCCCAAAAG 780
Db 840 CCCAGTATATGATTTGAACACACAGTGAAGAGCTGAGAGAGCATCCCAAAAG 899
QY 781 TATCAGGATAGTCTGTTTCAAACTTGCATGTGAGGCAATGTGCAAAATTAATCTATGCC 840
Db 900 TATCAGGATAGTCTGTTTCAAACTTGCATGTGAGGCAATGTGCAAAATTAATCTATGCC 959
QY 841 AGCTCATTTACAGCATGAGACAGCACTTATTACTCAATAAGACAGAAATGATGTAGAA 900
Db 960 AGCTCATTTACAGCATGAGACAGCACTTATTACTCAATAAGACAGAAATGATGTAGAA 1019
QY 901 AAGGCTGAATCTGTAATTAAGAAACAGGCTGGCTTGAAGAGGAGCAATTAACGA 960
Db 1020 AAGGCTGAATCTGTAATTAAGAAACAGGCTGGCTTGAAGAGGAGCAATTAACGA 1079
QY 961 TGGGCTGAAGTAAGAAACATGTATGATAGGGGAGCTCCAGACAGAAAAAGGTA 1020
Db 1080 TGGGCTGAAGTAAGAAACATGTATGATAGGGGAGCTCCAGACAGAAAAAGGTA 1139
QY 1021 GATCTGAATGCTGATCCCTGTGTGAGAGAAAGAAATGAAGCAAACTGCGCATGC 1080
Db 1140 GATCTGAATGCTGATCCCTGTGTGAGAGAAAGAAATGAAGCAAACTGCGCATGC 1199
QY 1081 TCAGAGAACTCTAGAGATACAGAAAGATGTTCTTGTGATTAACATTAATAGACGATTCAG 1140

Db 1200 TCAGAGAACTCTAGAGATACAGAAAGATGTTCTTGTGATTAACATTAATAGACGATTCAG 1259
QY 1141 AAGGTTAATGAGTGTGTTTCCAGAGTATGCACTGTTAGTGTGATGACTCATGAT 1200
Db 1260 AAGGTTAATGAGTGTGTTTCCAGAGTATGCACTGTTAGTGTGATGACTCATGAT 1319
QY 1201 GGGGAGCTGAATCAATGCCAAAGTACGTATGATTTGAAGCTTCAATGAGTATGAT 1260
Db 1320 GGGGAGCTGAATCAATGCCAAAGTACGTATGATTTGAAGCTTCAATGAGTATGAT 1379
QY 1261 GAAATTTCTGCTTTCAGAGAAATTAACCTTACGCGCATGATCTCATGAGGCTTTA 1320
Db 1380 GAAATTTCTGCTTTCAGAGAAATTAACCTTACGCGCATGATCTCATGAGGCTTTA 1439
QY 1321 ATATGTAAGGAAAGAGTTCACCTCAATCAGTAGAGATTAATTTGAAGCAAAATA 1380
Db 1440 ATATGTAAGGAAAGAGTTCACCTCAATCAGTAGAGATTAATTTGAAGCAAAATA 1499
QY 1381 TTTGGGAAACCTATCGGAAGAGGCAAGCTCCCAACTTAAGCCATGTAAGTAAAT 1440
Db 1500 TTTGGGAAACCTATCGGAAGAGGCAAGCTCCCAACTTAAGCCATGTAAGTAAAT 1559
QY 1441 CTAATTTATAGAGATTTGTTACTAGGCCACAGATTAATACAAAGCCCTCCATCAAT 1500
Db 1560 CTAATTTATAGAGATTTGTTACTAGGCCACAGATTAATACAAAGCCCTCCATCAAT 1619
QY 1501 AAATTAAGCGTAAAGAGAGACCTCATCAGGCGCTTCACTGAGAGATTTATCAAGAAA 1560
Db 1620 AAATTAAGCGTAAAGAGAGACCTCATCAGGCGCTTCACTGAGAGATTTATCAAGAAA 1679
QY 1561 GCAGATTTGGCAGTTCAAAAGAGCTCTGAAATGATTAATCAAGAGACTAACCAAGGAG 1620
Db 1680 GCAGATTTGGCAGTTCAAAAGAGCTCTGAAATGATTAATCAAGAGACTAACCAAGGAG 1739
QY 1621 CAGATTTGCTCAAGTATGATTAATTAATAGTGTCTATGAGATTAATCAAAAGGAT 1680
Db 1740 CAGATTTGCTCAAGTATGATTAATTAATAGTGTCTATGAGATTAATCAAAAGGAT 1799
QY 1681 TCTATTCAAGATGAGAAATAATCTTAACCAATAGAACTACGAAAAAGATGCTTTC 1740
Db 1800 TCTATTCAAGATGAGAAATAATCTTAACCAATAGAACTACGAAAAAGATGCTTTC 1859
QY 1741 AAAACGAAAGCTGAACCTATTAAGCAGAGTATTAAGCAATATGAACTGCAATTAATATC 1800
Db 1860 AAAACGAAAGCTGAACCTATTAAGCAGAGTATTAAGCAATATGAACTGCAATTAATATC 1919
QY 1801 CACAFTGCAAAAGCACTTAAGAAAGATGCTGAGGAGAAAGTCTTACAGGCAATAT 1860
Db 1920 CACAFTGCAAAAGCACTTAAGAAAGATGCTGAGGAGAAAGTCTTACAGGCAATAT 1979
QY 1861 CATGGCTTGAAGTATGATGATGATTAAGTCAAGCCACCTAATTTACTGAAATTCGA 1920
Db 1980 CATGGCTTGAAGTATGATGATGATTAAGTCAAGCCACCTAATTTACTGAAATTCGA 2039
QY 1921 ATTGATAGTGTCTTACAGAGTGAAGAGATTAAGCAAAAGAAAGTCAAGCCAGTTC 1980
Db 2040 ATTGATAGTGTCTTACAGAGTGAAGAGATTAAGCAAAAGAAAGTCAAGCCAGTTC 2099
QY 1981 AGGCAAGCAGAAACCTTAACATCATGGAAGGTAAAGAACCTGCAATGAGGCAAGAAAG 2040
Db 2100 AGGCAAGCAGAAACCTTAACATCATGGAAGGTAAAGAACCTGCAATGAGGCAAGAAAG 2159
QY 2041 AGTAACAAGCCCAATGAAGACAGAAAGTAAAGAGATGATGATCTTCCAGAGCTG 2100
Db 2160 AGTAACAAGCCCAATGAAGACAGAAAGTAAAGAGATGATGATCTTCCAGAGCTG 2219
QY 2101 AAGTTAACAAATGCACTGCTTCTTTACTTAAGTGTTCATAATACAGTAACTTAAGAA 2160
Db 2220 AAGTTAACAAATGCACTGCTTCTTTACTTAAGTGTTCATAATACAGTAACTTAAGAA 2279
QY 2161 TTTGTCAATCTCTACCTTCCAGAGAAAGAAAGAAAGAACTAGAAACAGTTAAAGTG 2220

Db	2280	TTTGCAATCCTACGCTCCCAAGAGAAAGAAAAGAGAAACTAGAAACAGTTAAAGTC	2359
OY	2221	TCATATAATGCTGAGAAGACCCCAAGATCTCATGTTAAGTGGAGAAGGGTTTTGCCAACT	2280
Db	2340	TCATATAATGCTGAGAAGACCCCAAGATCTCATGTTAAGTGGAGAAGGGTTTTGCCAACT	2399
OY	2281	GAAAGATCTGTAGAGAGTAGACAGATTTTCATTTGTTGTTACTGGTACTGATTTATGGCACTCAG	2340
Db	2400	GAAAGATCTGTAGAGAGTAGACAGATTTTCATTTGTTGTTACTGGTACTGATTTATGGCACTCAG	2459
OY	2341	GAAAGTATCTGCTTACTAGGAAGTTAGACACTGTAGGAAAGGCAAAAACAGAACCAATPAAA	2400
Db	2460	GAAAGTATCTGCTTACTAGGAAGTTAGACACTGTAGGAAAGGCAAAAACAGAACCAATPAAA	2519
OY	2401	TGTGTGAGTCAGTGTGCGACATTTTGGAAAACCCCAAGGAGCTAATTCATGTTGTTCCAAA	2460
Db	2520	TGTGTGAGTCAGTGTGCGACATTTTGGAAAACCCCAAGGAGCTAATTCATGTTGTTCCAAA	2579
OY	2461	GATATAAGAAATGACACACAGAAAGCCTTTTAACTATCCATTGGGACATGGAATTAACACAGT	2520
Db	2580	GATATAAGAAATGACACAGAAAGCCTTTTAACTATCCATTGGGACATGGAATTAACACAGT	2639
OY	2521	CGGGAACCAACATAGAAATGSAAGAAAGTAACTTATGTCGCTATTTGCAACAATPACA	2580
Db	2640	CGGGAACCAACATAGAAATGSAAGAAAGTAACTTATGTCGCTATTTGCAACAATPACA	2699
OY	2581	TTCAAGGTTTCCAAAGCGCGACAGCTATTTGCTGTGTTTCAATCCAGGAAATGCAAGAGAG	2640
Db	2700	TTCAAGGTTTCCAAAGCGCGACAGCTATTTGCTGTGTTTCAATCCAGGAAATGCAAGAGAG	2759
OY	2641	GAATGTGCACATTTCTGTGCCACTCTGCGGTCTTTAAAGAAACAAAGTCCAAAAGTCACT	2700
Db	2760	GAATGTGCACATTTCTGTGCCACTCTGCGGTCTTTAAAGAAACAAAGTCCAAAAGTCACT	2819
OY	2701	TTTGAATGTGAACAAAAGAAAGAAATCAAGAGAAAGATGAGTATATATCAAGCCTGTA	2760
Db	2820	TTTGAATGTGAACAAAAGAAAGAAATCAAGAGAAAGATGAGTATATATCAAGCCTGTA	2879
OY	2761	CAGACAGTTAATATCACTGACGAGCTTCTGTGTGGTGGTCAGAAAAGATTAAGCCAGTTGAT	2820
Db	2880	CAGACAGTTAATATCACTGACGAGCTTCTGTGTGGTGGTCAGAAAAGATTAAGCCAGTTGAT	2939
OY	2821	AATGCCAAATGTACTATCAAAAGAGGCGCTTAGGTTTGTCTATATCTCACTGACAGGC	2880
Db	2940	AATGCCAAATGTACTATCAAAAGAGGCGCTTAGGTTTGTCTATATCTCACTGACAGGC	2999
OY	2881	AAGCAAACTGGACATCTACTCCAAATPAAACATGAGCTTTTACAAAACCCATATCGTATA	2940
Db	3000	AAGCAAACTGGACATCTACTCCAAATPAAACATGAGCTTTTACAAAACCCATATCGTATA	3059
OY	2941	CCACCACATTTTCCCATCATCAGTCACATTTGGTTTAAACCTPAAATGTAGAAAATCTGCTAGAG	3000
Db	3060	CCACCACATTTTCCCATCATCAGTCACATTTGGTTTAAACCTPAAATGTAGAAAATCTGCTAGAG	3119
OY	3001	GAAAACTTTGAGGAACATTCATGTCACTGACCTGAAAGAGAATGGGAAATGAGACATTTCCA	3060
Db	3120	GAAAACTTTGAGGAACATTCATGTCACTGACCTGAAAGAGAATGGGAAATGAGACATTTCCA	3179
OY	3061	AGTACAGTGGACACAATTTAGCCGCTPAAATPAACTTGGAGAAAATGTTTTTAAAGAACGACG	3120
Db	3180	AGTACAGTGGACACAATTTAGCCGCTPAAATPAACTTGGAGAAAATGTTTTTAAAGAACGACG	3239
OY	3121	TCAAGCAATATTTAATGAAAGTAGTCCAGTACTAATGAAGTGGGCTCCAGATPAAATGAAA	3180
Db	3240	TCAAGCAATATTTAATGAAAGTAGTCCAGTACTAATGAAGTGGGCTCCAGATPAAATGAAA	3299
OY	3181	ATAGGTTCCAGTGAATGAAAAATTCACAAGACAGAACTAGGTAGAAAACAGAGGGCCAAAAATTG	3240
Db	3300	ATAGGTTCCAGTGAATGAAAAATTCACAAGACAGAACTAGGTAGAAAACAGAGGGCCAAAAATTG	3359
OY	3241	AATGCTATGCTTAATATTAGGGGTTTTGCAACCTGAGTCTATPAAACAAAGCTTCTCTGGA	3300
Db	3360	AATGCTATGCTTAATATTAGGGGTTTTGCAACCTGAGTCTATPAAACAAAGCTTCTCTGGA	3419

QY	3301	AGTAATTGTAAAGCATCTCTGAAATATAAAAAGCAAGATATGTGAAGAATGTTCAGACGTGTT	3360
Db	3420	AGTAATTGTAAAGCATCTCTGAAATATAAAAAGCAAGATATGTGAAGAATGTTCAGACGTGTT	3479
QY	3351	AATCAGATTCTCTCCATATCTGATATTTACATTAACCTATAGAACGCCATGTGGGAAGTGT	3420
Db	3480	AATACAGATTCTCTCCATATCTGATATTTACATTAACCTATAGAACGCCATGTGGGAAGTGT	3539
QY	3421	CATGCATCTCAGGTTTGTTGTCGAGACACCTGATGACCTGTAGATGATGTGGAATTAAG	3480
Db	3540	CATGCATCTCAGGTTTGTTGTCGAGACACCTGATGACCTGTAGATGATGTGGAATTAAG	3599
QY	3481	GAAGATACTAGTTTGTCTGAAATGACATTTAAGAAAGTCTGCTGTTTTTATGCAAAAGC	3540
Db	3600	GAAGATACTAGTTTGTCTGAAATGACATTTAAGAAAGTCTGCTGTTTTTATGCAAAAGC	3659
QY	3541	GTCCAGAAAGAGAGCTTAGCAGAGAGTCTTAGCCCTTTACCCCATATACATTTTGGCTCAG	3600
Db	3660	GTCCAGAAAGAGAGCTTAGCAGAGAGTCTTAGCCCTTTACCCCATATACATTTTGGCTCAG	3719
QY	3601	GTTTACCGAAGAGGGGCCAAGAAATTAAGTACGCTCAGAGAGAACTTATCTAGTGAAGAT	3660
Db	3720	GTTTACCGAAGAGGGGCCAAGAAATTAAGTACGCTCAGAGAGAACTTATCTAGTGAAGAT	3779
QY	3661	GAAGAGCTTCCCTGCTTCCAACTCTGTTATTTTGGTAAAGTAAACATATACCTTTCAG	3720
Db	3780	GAAGAGCTTCCCTGCTTCCAACTCTGTTATTTTGGTAAAGTAAACATATACCTTTCAG	3839
QY	3721	TCTACTAGGCAATAGACCGCTGTGCATCCGAGTGTCTGTCTAGAACACAGAGAGAAATTTA	3780
Db	3840	TCTACTAGGCAATAGACCGCTGTGCATCCGAGTGTCTGTCTAGAACACAGAGAGAAATTTA	3899
QY	3781	TTATCATTTGAAGATAGCTTAAATGACTGTCAGTATACCAAGGTAAATTTGGCAAGGACATCT	3840
Db	3900	TTATCATTTGAAGATAGCTTAAATGACTGTCAGTATACCAAGGTAAATTTGGCAAGGACATCT	3959
QY	3841	CAGGAATCATCACTTAGTAGGAGAAACAAATGTTCTGCTAGCTTGTTTCTTCAAGTGC	3900
Db	3960	CAGGAATCATCACTTAGTAGGAGAAACAAATGTTCTGCTAGCTTGTTTCTTCAAGTGC	4019
QY	3901	AGTGAATTTGGAAGCTTACTGCAAAATACAAACCCAGAGATCCCTTCTTGATTTGGTCT	3960
Db	4020	AGTGAATTTGGAAGCTTACTGCAAAATACAAACCCAGAGATCCCTTCTTGATTTGGTCT	4079
QY	3961	TCCAAACAAATAGAGGACATCACTGTGAAAGCCAGAGAGTTGGTCTGAGTGCACAAAGATTG	4020
Db	4080	TCCAAACAAATAGAGGACATCACTGTGAAAGCCAGAGAGTTGGTCTGAGTGCACAAAGATTG	4139
QY	4021	GTTTCAGATGATGAAGAAAGAGAAAGCGGGCTTGGAAAGAAATTAATCAAGAAAGCAAAAGC	4080
Db	4140	GTTTCAGATGATGAAGAAAGAGAAAGCGGGCTTGGAAAGAAATTAATCAAGAAAGCAAAAGC	4199
QY	4081	ATGGAATTCAACTTAGTGAAGCAGCATCTTGGGTGTGAGATGAAACAAAGGTCTCTGAA	4140
Db	4200	ATGGAATTCAACTTAGTGAAGCAGCATCTTGGGTGTGAGATGAAACAAAGGTCTCTGAA	4259
QY	4141	GACTGCTCAGGGCTATCTCTCACAAGTGCATTTTAAACACTGCAGAGAGGATATCCATG	4200
Db	4260	GACTGCTCAGGGCTATCTCTCACAAGTGCATTTTAAACACTGCAGAGAGGATATCCATG	4319
QY	4201	CAACATTAACCTGATTAAGAGCTTCAGCAGAGAAATGGCTGAATGAGAGCTGTGTTGAACAG	4260
Db	4320	CAACATTAACCTGATTAAGAGCTTCAGCAGAGAAATGGCTGAATGAGAGCTGTGTTGAACAG	4379
QY	4261	CATGGGAGCCAGCTTCTTAACAGCTATACCTTCATTAAGTGACTCTTCTGCCCCTTGAG	4320
Db	4380	CATGGGAGCCAGCTTCTTAACAGCTATACCTTCATTAAGTGACTCTTCTGCCCCTTGAG	4439
QY	4321	GACCTGGAAATTCAGAAACAAAGACATTCAGAAAACACAGATTAATCTTACAGAAATGT	4380
Db	4440	GACCTGGAAATTCAGAAACAAAGACATTCAGAAAACACAGATTAATCTTACAGAAATGT	4499

QY 4361 AGTGAATACCTATAGCCAGAAATCCAGAGGCCCTTTCGCTGACAAAGTTGAGTGCT 4440
DB 4500 AGTGAATACCTATAGCCAGAAATCCAGAGGCCCTTTCGCTGACAAAGTTGAGTGCT 4559
QY 4441 GCAGTACTTCTACCAAGTAAATAAGAACAGAGTGAGAAAGGTCATCCCTTTAA 4500
DB 4500 GCAGTACTTCTACCAAGTAAATAAGAACAGAGTGAGAAAGGTCATCCCTTTAA 4619
QY 4501 TGCCCATCATTAAGATAGTGTGTACATGACAGAGTGTCTGAGAGTCTTCAGATAGA 4560
DB 4620 TGCCCATCATTAAGATAGTGTGTACATGACAGAGTGTCTGAGAGTCTTCAGATAGA 4679
QY 4561 AACATCCATCTCAAGAGAGAGCTCATTAAGTTGATGTGAGAGCAGACAGCTGAA 4620
DB 4680 AACATCCATCTCAAGAGAGAGCTCATTAAGTTGATGTGAGAGCAGACAGCTGAA 4739
QY 4621 GAGTGTGGGCGACAGATTTGCGAAACATCTTCTGCGCAAGCAACATCTAGAGGA 4680
DB 4740 GAGTGTGGGCGACAGATTTGCGAAACATCTTCTGCGCAAGCAACATCTAGAGGA 4799
QY 4681 ACCCTTACCTGGAATCTGGAATCAGCCTCTCTGATGACCTGATCTGATCTCT 4740
DB 4800 ACCCTTACCTGGAATCTGGAATCAGCCTCTCTGATGACCTGATCTGATCTCT 4859
QY 4741 GAAGACAGAGCCCGAGAGTCACTGTGTGGCAACATCAATCTTCAACCTCTGCATG 4800
DB 4860 GAAGACAGAGCCCGAGAGTCACTGTGTGGCAACATCAATCTTCAACCTCTGCATG 4919
QY 4801 AAAGTTCGCCAATTAAGTTGCAATCTGCCAGAGTCCAGCTGCTGCTATCTACT 4860
DB 4920 AAAGTTCGCCAATTAAGTTGCAATCTGCCAGAGTCCAGCTGCTGCTATCTACT 4979
QY 4861 GATACCTGCTGGTATATGCAATGAGAGAAAGTGTGAGAGGAGAGAGCAATTTGACA 4920
DB 4980 GATACCTGCTGGTATATGCAATGAGAGAAAGTGTGAGAGGAGAGAGCAATTTGACA 5039
QY 4921 GCTTCACAGAAAGGTCACAAAAGATGTCATGCTGTCTGCTGACCCAGAA 4980
DB 5040 GCTTCACAGAAAGGTCACAAAAGATGTCATGCTGTCTGCTGACCCAGAA 5099
QY 4981 GAATTTATGCTGCTGATCAAGTTGCGAAAAACACATCATCTTAACTAATCTAAT 5040
DB 5100 GAATTTATGCTGCTGATCAAGTTGCGAAAAACACATCATCTTAACTAATCTAAT 5159
QY 5041 ACTGAAGAGTACTCATGTGTTATGAAAACAGATGCTGAGTTGTGTGTAACGACA 5100
DB 5160 ACTGAAGAGTACTCATGTGTTATGAAAACAGATGCTGAGTTGTGTGTAACGACA 5219
QY 5101 CTGAATATTTTCTAGAAATGCGGAGAGAAATGGTATGATCTATTTCTGGGTGAC 5160
DB 5220 CTGAATATTTTCTAGAAATGCGGAGAGAAATGGTATGATCTATTTCTGGGTGAC 5279
QY 5161 CAGTCTATTTAAGAAAGAAATGCTGAATGAGATGATTTTGAATCAGAGAGATGTG 5220
DB 5280 CAGTCTATTTAAGAAAGAAATGCTGAATGAGATGATTTTGAATCAGAGAGATGTG 5339
QY 5221 GTCAATGAGAAACCAACCAAGTCCAAAGCGAGACAGAGATCCAGAGAGAAAGATC 5280
DB 5340 GTCAATGAGAAACCAACCAAGTCCAAAGCGAGACAGAGATCCAGAGAGAAAGATC 5399
QY 5281 TTGCGGGGGGTAGAAATCTGTTGCTATGAGGCGCTTACCAACATGCCCAGATCACTG 5340
DB 5400 TTGCGGGGGGTAGAAATCTGTTGCTATGAGGCGCTTACCAACATGCCCAGATCACTG 5459
QY 5341 GAATGATGATGACAGTGTGTGTCTGCTGGAAGAGCTTTCATCAATCCCTT 5400
DB 5460 GAATGATGATGACAGTGTGTGTCTGCTGGAAGAGCTTTCATCAATCCCTT 5519
QY 5401 GGACAGAGTGTCAACCAATGTGTGTGTGACGACAGATGCTGACAGAGAGCAATGGC 5460
DB 5520 GGACAGAGTGTCAACCAATGTGTGTGTGACGACAGATGCTGACAGAGAGCAATGGC 5579
QY 5461 TTCCATGCAATTTGGGAGATGTGTGAGGACCTGTGTGTGACCCGAGAGTGGGTGTGAC 5520

DB 5580 TTCATGCAATTTGGGAGATGTGTGAGGACCTGTGTGAGCCGAGAGTGGGTGTGAC 5639
QY 5521 AGTGTAGCACTCTACCAAGTCCAGAGAGTGTGACACACTTACCTGATACCCCAATCCCCAC 5580
DB 5640 AGTGTAGCACTCTACCAAGTCCAGAGAGTGTGACACACTTACCTGATACCCCAATCCCCAC 5699
QY 5581 AGCCACTAC 5589
DB 5700 AGCCACTAC 5708

RESULT 4
US-08-658-322-1
Sequence 1, Application US/08658322
Patent No. 5869245
GENERAL INFORMATION:
APPLICANT: Yeung, Anthony T.
TITLE OF INVENTION: Mismatch Endonuclease And Its Use In
NUMBER OF SEQUENCES: 13
CORRESPONDENCE ADDRESS:
ADDRESSEE: Dann, Dorfman, Herrell and Skillman, P.C.
STREET: 1601 Market Street, Suite 720
CITY: Philadelphia
STATE: PA
COUNTRY: USA
ZIP: 19103-2307
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/658,322
FILING DATE: 05-JUN-1996
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Hagan, Patrick J.
REGISTRATION NUMBER: 27,643
TELECOMMUNICATION INFORMATION:
TELEPHONE: (215) 563-4100
TELEFAX: (215) 563-4044
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 5711 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: not relevant
MOLECULE TYPE: DNA (genomic)
HYPOTHETICAL: NO
ANTI-SENSE: NO
US-08-658-322-1

Query Match 99.9%; Score 5585.8; DB 2; Length 5711;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 5587; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 ATGGATTAATGCTGCTTGGCTGGAAGAGTACAAAATGCAATTAATGATGACGAGAA 60
DB 120 ATGGATTAATGCTGCTTGGCTGGAAGAGTACAAAATGCAATTAATGATGACGAGAA 179
QY 61 ATCTTAGAGTCTCCATCTGCTGAGTGTGATCAAGAGACCTGCTCCACAAAGTGTAC 120
DB 180 ATCTTAGAGTCTCCATCTGCTGAGTGTGATCAAGAGACCTGCTCCACAAAGTGTAC 239
QY 121 CACATATTTTCAAAATTTTGCATGCTGAACCTTCTCAACGAGAAAGGCTTACAG 180
DB 240 CACATATTTTCAAAATTTTGCATGCTGAACCTTCTCAACGAGAAAGGCTTACAG 299
QY 181 TGCTCTTATGTAAGATGATATTAACCAAGAGGCTTACAGAAAGTACAGATTTAGT 240
DB 300 TGCTCTTATGTAAGATGATATTAACCAAGAGGCTTACAGAAAGTACAGATTTAGT 359

QY	241	CAACTGTGTAAGAGCTATTGAAAATCAATTTGTGCTTTTCACCTTGACACAGCTTTGGAG	300
Db	360	CAACTGTTGTAAGAGCTATTGAAAATCAATTTGTGCTTTTCACCTTGACACAGCTTTGGAG	419
QY	301	TATGCAAAACAGCTAATATTTTGCAAAAAAGAAAATACTCCCGCAACATGTAAAAGAT	360
Db	420	TATGCAAAACAGCTAATATTTTGCAAAAAAGAAAATACTCTCTGAAACATGTAAAAGAT	479
QY	361	GAACTTCTATCATCCAAAGTATGGGCTACAGAAACCGTGCCTAAAAGACTTACAGAGT	420
Db	480	GAACTTCTATCATCCAAAGTATGGGCTACAGAAACCGTGCCTAAAAGACTTACAGAGT	539
QY	421	GAACCCGAAANCCCTCCTTCGACGAAACACAGTCTCACTGTCCACTCTTACCTTGGAA	480
Db	540	GAACCCGAAANCCCTCCTTCGACGAAACACAGTCTCACTGTCCACTCTTACCTTGGAA	599
QY	481	ACTGTGAAACCTGAGAGCAAAAGCAGCGGATACAACTCAAAAACAGCTCTGTACATTT	540
Db	600	ACTGTGAAACCTGAGAGCAAAAGCAGCGGATACAACTCAAAAACAGCTCTGTACATTT	659
QY	541	GAATTTGGATCTGATTTCTTCTGAGATACCGTTAATAAGCACTTAATTGCACTGTGGGA	600
Db	660	GAATTTGGATCTGATTTCTTCTGAGATACCGTTAATAAGCACTTAATTGCACTGTGGGA	719
QY	601	GATCAGAATTTGTTACAAATCACCCCTCAAGAACACAGAGATGAATATGATTGGATTCT	660
Db	720	GATCAGAATTTGTTACAAATCACCCCTCAAGAACACAGAGATGAATATGATTGGATTCT	779
QY	661	GCAAAAAAGCGTCTGTGTAATTTTCTGAGACGCGATGTACAAATACTGAACATCATCAA	720
Db	780	GCAAAAAAGCGTCTGTGTAATTTTCTGAGACGCGATGTACAAATACTGAACATCATCAA	839
QY	721	CCCAAGTAATATGATTTGAACACACATGAGAAAGCGTGGAGTGAAGGATCCCAAAAAG	780
Db	840	CCCAAGTAATATGATTTGAACACACATGAGAAAGCGTGGAGTGAAGGATCCCAAAAAG	899
QY	781	TATCAGGGTACTTCTGTTTCAAACCTGGATGTGGAACCATGTGGACAAATACTATGCGC	840
Db	900	TATCAGGGTACTTCTGTTTCAAACCTGGATGTGGAACCATGTGGACAAATACTATGCGC	959
QY	841	AGCTCATTTACAGCATGAGACACAGCATTTATTCTCACTAAAGACAGATGATGTAGAA	900
Db	960	AGCTCATTTACAGCATGAGACACAGCATTTATTCTCACTAAAGACAGATGATGTAGAA	1019
QY	901	AAGCGTAATCTGTGAATFAAAGCAAAAGCGCTGGCTTGAAGAGGACCAATATAACGA	960
Db	1020	AAGCGTAATCTGTGAATFAAAGCAAAAGCGCTGGCTTGAAGAGGACCAATATAACGA	1079
QY	961	TGGGCTGGAATTAAGAAACATGTATGATAGGCGGACTCCACGACAGAAAAAAGGTA	1020
Db	1080	TGGGCTGGAATTAAGAAACATGTATGATAGGCGGACTCCACGACAGAAAAAAGGTA	1139
QY	1021	GATCTGAATGCTGATCCCTGCTGAGAGAAAAAGATGGAATTAAGCAAAAACCTGCCATGC	1080
Db	1140	GATCTGAATGCTGATCCCTGCTGAGAGAAAAAGATGGAATTAAGCAAAAACCTGCCATGC	1199
QY	1081	TCAGAGAAATCCTAGAGATACTGAAGATGTTCCCTGGATACACTAAATAGACGATTTAG	1140
Db	1200	TCAGAGAAATCCTAGAGATACTGAAGATGTTCCCTGGATACACTAAATAGACGATTTAG	1259
QY	1141	AAAATTAATGATGCTGTTTCCAGAAAGTATGAACTGTTAGAGTTCTGATGACTCACATGAT	1200
Db	1260	AAAATTAATGATGCTGTTTCCAGAAAGTATGAACTGTTAGAGTTCTGATGACTCACATGAT	1319
QY	1201	GGGAGAGCTGTAATCAAAATGCCAAAGTAGCTGATGATGAGAGCTTCTAAAGAGGTAGAT	1260
Db	1320	GGGAGAGCTGTAATCAAAATGCCAAAGTAGCTGATGATGAGAGCTTCTAAAGAGGTAGAT	1379
QY	1261	GAATATTTCTGGTCTTTCAGAGAAAAATAGACTTACTGGCCAGTGAATCCTCATGAGGCTTTA	1320
Db	1380	GAATATTTCTGGTCTTTCAGAGAAAAATAGACTTACTGGCCAGTGAATCCTCATGAGGCTTTA	1439

QY	1321	ATATGTAAAAAGTGAAGAGTTCTACCTCCAAATCATGAGAGAGTAATATTGAAGCAAAATA	1380
Db	1440	ATATGTAAAAAGTGAAGAGTTCTACCTCCAAATCAGTAGAGAGTAATATTGAAGCAAAATA	1499
QY	1381	TTTGGGAAAACCTATTCGGAGAAGGCAAGCCGCCCAACTTAAGCGATGTAACTGAAAT	1440
Db	1500	TTTGGGAAAACCTATTCGGAGAAGGCAAGCCGCCCAACTTAAGCGATGTAACTGAAAT	1559
QY	1441	CTAAATTATAGAGCATTTTGTTACTAGGCGACAGATTAATACAGAGAGCGCCCTCACAAAT	1500
Db	1560	CTAAATTATAGAGCATTTTGTTACTAGGCGACAGATTAATACAGAGAGCGCCCTCACAAAT	1619
QY	1501	AAATTAAAGCGTAAAAAGAGACTATCATCAGCGCTTCATCCTGAGGATTTTATCAAGAAA	1560
Db	1620	AAATTAAAGCGTAAAAAGAGACTATCATCAGCGCTTCATCCTGAGGATTTTATCAAGAAA	1679
QY	1561	GGAGATTGGCGAGTTCCAAAGACCTCCAAATGATTAATTCAGGGAACATCAACCAACGGAG	1620
Db	1680	GGAGATTGGCGAGTTCCAAAGACCTCCAAATGATTAATTCAGGGAACATCAACCAACGGAG	1739
QY	1621	CAGATGTGTCGAATGATGAATATTTACTAATAGTGGTCATGGAATTAACCAAAAGTGAT	1680
Db	1740	CAGATGTGTCGAATGATGAATATTTACTAATAGTGGTCATGGAATTAACCAAAAGTGAT	1799
QY	1681	TCTATTCAAGATGAGAAAAATCTTAACCCATTAAGATCATCTCGAAAAAGAAATTCGTTTC	1740
Db	1800	TCTATTCAAGATGAGAAAAATCTTAACCCATTAAGATCATCTCGAAAAAGAAATTCGTTTC	1859
QY	1741	AAAGGAAAGCTGAACCTTAAGCGAGTAAAGCATTAAGCAATTAAGCAATTCGAATTAATATC	1800
Db	1860	AAAGGAAAGCTGAACCTTAAGCGAGTAAAGCATTAAGCAATTAAGCAATTCGAATTAATATC	1919
QY	1801	CACATTCAAAAAGCACTTAAAAAGATAGGCGTGAAGAGAGAGTCTTACACAGGACATATT	1860
Db	1920	CACATTCAAAAAGCACTTAAAAAGATAGGCGTGAAGAGAGAGTCTTACACAGGACATATT	1979
QY	1861	CATGCGCTTGAACTAGTAGTGAATCTAAGCCCACTTAATTTGACTGAATTCGAA	1920
Db	1980	CATGCGCTTGAACTAGTAGTGAATCTAAGCCCACTTAATTTGACTGAATTCGAA	2039
QY	1921	ATTGATAGTTGTTCTAGCAGTGAAGATTAAGAAAAAAAGTACCAACCAATCCGAGTC	1980
Db	2040	ATTGATAGTTGTTCTAGCAGTGAAGATTAAGAAAAAAAGTACCAACCAATCCGAGTC	2099
QY	1981	AGGCACAGAGAAACCTCAACTCATGGAAGGTAAAGAACTGCAACCTGGAGCCCAAG	2040
Db	2100	AGGCACAGAGAAACCTCAACTCATGGAAGGTAAAGAACTGCAACCTGGAGCCCAAG	2159
QY	2041	AGTACAAGCCAAATGAACAGACAAGTAAAAAGACATGACAGTACTTTCCAGAGCTG	2100
Db	2160	AGTACAAGCCAAATGAACAGACAAGTAAAAAGACATGACAGTACTTTCCAGAGCTG	2219
QY	2101	AAGTTAACAAATGCACCTGGTTCCTTTACTAAGTGTCAATTAACCACTTAAGAA	2160
Db	2220	AAGTTAACAAATGCACCTGGTTCCTTTACTAAGTGTCAATTAACCACTTAAGAA	2279
QY	2161	TTTGTCAATCCAGGCTTCCAAAGAGAAGAAAAAAGCAAGAACTTAGAAACAGTTAAAGTG	2220
Db	2280	TTTGTCAATCCAGGCTTCCAAAGAGAAGAAAAAAGCAAGAACTTAGAAACAGTTAAAGTG	2339
QY	2221	TCTAATAATGCTGAAGACCCCAAGAGTCTCATGTTAAGTGGAGAAAGGTTTTCCAAACT	2280
Db	2340	TCTAATAATGCTGAAGACCCCAAGAGTCTCATGTTAAGTGGAGAAAGGTTTTCCAAACT	2399
QY	2281	GAAAGATCTGTAAGAGATGACAGTATTTCAATGCTACCTGGTACTGATTAAGCAGTCAG	2340
Db	2400	GAAAGATCTGTAAGAGATGACAGTATTTCAATGCTACCTGGTACTGATTAAGCAGTCAG	2459
QY	2341	GAAAGATCTGTTACTGGAAGTTAGACATCTAGGGAAGCGAAAAACAGAACCAAAATAAA	2400
Db	2460	GAAAGATCTGTTACTGGAAGTTAGACATCTAGGGAAGCGAAAAACAGAACCAAAATAAA	2519
QY	2401	TGTGTGATCATGTTGACGATTTTGAAAAACCCCAAGGAGCATTAATTCATGCTTGTCCAAA	2460

Dd		2520	TGTGAGAGTCAGTGTGCACGACATTTTAAAAAACCCTCAAGGAGCATTAATTCATGAGTTGGTTCCAA	2579
Oy		2461	GATAATTAGAATTGACACAGAAAGCGCTTAAATGATTCATTGGGACATGAAGTTAACACAGT	2520
Dd		2580	GATATATAGAAATGACACAGAAAGCGCTTAAATGATTCATTGGGACATGAAGTTAACACAGT	2639
Oy		2521	CGGGAACAACAGCATATGAATGGAGAAAGTGAACTTGATGCTCAGTATTGGCAGATATCA	2580
Dd		2640	CGGGAAACAAGCATATGAATGGAGAAAGTGAACTTGATGCTCAGTATTGGCAGATATCA	2639
Oy		2581	TTCAAGGTTTTCAAAACGCCGACGATTTGCTGTTTTCAAAATCCGAGAAATGCAAGAAAG	2640
Dd		2700	TTCAAGGTTTTCAAAACGCCGACGATTTGCTGTTTTCAAAATCCGAGAAATGCAAGAAAG	2758
Oy		2641	GAATGTGCAACATTTCTGCCCCACTCTGGGTCTTAAAGAAACAAGTCCAAAAGTCACT	2700
Dd		2760	GAATGTGCAACATTTCTGCCCCACTCTGGGTCTTAAAGAAACAAGTCCAAAAGTCACT	2819
Oy		2701	TTTGAATGTGAACAAAGAGAAAGAAATCAAGAAAGAAATGAGTCTAATATCAAGCTCTA	2760
Dd		2820	TTTGAATGTGAACAAAGAGAAAGAAATCAAGAAAGAAATGAGTCTAATATCAAGCTCTA	2879
Oy		2761	CAGACAGTTAATATCTGCGAGCGCTTCTGTTGGTGCAGAAAGATTAAGCCAGTTGAT	2820
Dd		2880	CAGACAGTTAATATCTGCGAGCGCTTCTGTTGGTGCAGAAAGATTAAGCCAGTTGAT	2939
Oy		2821	AATGCCAATGAGTAGTATCAAAAGAGAGCGCTCTAGTTTTGTCTATCTCAGTTCAGAGGC	2880
Dd		2940	AATGCCAATGAGTAGTATCAAAAGAGAGCGCTCTAGTTTTGTCTATCTCAGTTCAGAGGC	2939
Oy		2881	AACGAACGTGCATCTATCTCCAATTAACATGAGCTTTTACAAAACCCATATCTGATA	2940
Dd		3000	AACGAACGTGCATCTATCTCCAATTAACATGAGCTTTTACAAAACCCATATCTGATA	3059
Oy		2941	CCACACATTTTCCCATAAGCATATTTTAAACTAATGTAAGAAATTAATCTGTAAG	3000
Dd		3060	CCACACATTTTCCCATAAGCATATTTTAAACTAATGTAAGAAATTAATCTGTAAG	3119
Oy		3001	GA AAACTTTGAGGAACATTTCAATGTCCACTGAAAGAGAAATGGGAAATGAGAACATTTCCA	3060
Dd		3120	GA AAACTTTGAGGAACATTTCAATGTCCACTGAAAGAGAAATGGGAAATGAGAACATTTCCA	3179
Oy		3061	AGTACAGTGCACACAATTAGCCGTAATTAACATTAGAGAAATGTTTTTAAAGAACCCAGC	3120
Dd		3180	AGTACAGTGCACACAATTAGCCGTAATTAACATTAGAGAAATGTTTTTAAAGAACCCAGC	3239
Oy		3121	TC AACCAATTAATGAAGTAGGTTCCAGTCTATATGAAGTGGGCTCCAGATTAATGAA	3180
Dd		3240	TC AACCAATTAATGAAGTAGGTTCCAGTCTATATGAAGTGGGCTCCAGATTAATGAA	3299
Oy		3181	ATAGGTCCAGTATGAAGAAACATTTCAACAGAACACTAGGTAGAAACAGAGGCCAAAATTG	3240
Dd		3300	ATAGGTCCAGTATGAAGAAACATTTCAACAGAACACTAGGTAGAAACAGAGGCCAAAATTG	3359
Oy		3241	AATGCTATGCTTAGATTAGGGGTTTTGCAACCTGAGTCTATTAACAAGTCTTCTCGGA	3300
Dd		3360	AATGCTATGCTTAGATTAGGGGTTTTGCAACCTGAGTCTATTAACAAGTCTTCTCGGA	3419
Oy		3301	AGTAAATTGAAGCATCTCGAAATTAATAAAGCAAGAAATGAAGAAGTAGTTCAGACTGT	3360
Dd		3420	AGTAAATTGAAGCATCTCGAAATTAATAAAGCAAGAAATGAAGAAGTAGTTCAGACTGT	3479
Oy		3361	AATACAGATTTCTCCCATATCTGATTCAGATTAACCTAGAAACAGCCATGAGGAAGTAGT	3420
Dd		3480	AATACAGATTTCTCCCATATCTGATTCAGATTAACCTAGAAACAGCCATGAGGAAGTAGT	3539
Oy		3421	CATGCAATTCAGAGTTGTTCTGAGACACCTGATGACCTGTTAGATGATGATGAATTAAG	3480
Dd		3540	CATGCAATTCAGAGTTGTTCTGAGACACCTGATGACCTGTTAGATGATGATGAATTAAG	3599
Oy		3481	GAGATACTAGTTTGTCTGAAATGACATTAAGGAAGTCTGCTGTTTTAGCAAAAGC	3540

Db	3600	GAGATCTACTAGTTGTTTGGTGGAAAATGACATTAAAGAAAGTTCTGGCTGTTTAAAGCAAAAGC	3659
QY	3541	GTCCGAAAGAGAGACTTACGAGAGAGTCCATGACCCTTTACCCATACATTTGGCTCAG	3600
Db	3660	GTCCAGAAAGAGAGACTTACGAGAGAGTCCATGACCCTTTACCCATACATTTGGCTCAG	3719
QY	3601	GATTACCGAAGAGGGGCCAAGAAATTAAAGTCTCAGAAAGAACTTATTAGTGAAGAT	3660
Db	3720	GATTACCGAAGAGGGGCCAAGAAATTAAAGTCTCAGAAAGAACTTATTAGTGAAGAT	3779
QY	3661	GAAGAGCTCCCTGGTCCCAACACTGTTATTTGGTAAAGAAACAAATATCTCTCAG	3720
Db	3780	GAAGAGCTCCCTGGTCCCAACACTGTTATTTGGTAAAGTAAATATACCTTCAG	3839
QY	3721	TCTACTAGGATAGCAGCGTGTCTACGAGTGTCTGTAAAGAACAGAGAGAAATTAA	3780
Db	3840	TCTACTAGGATAGCAGCGTGTCTACGAGTGTCTGTAAAGAACAGAGAGAAATTAA	3899
QY	3781	TTATCATTTGAAGAAATAGCTTAAATATGACGTACCAAGATATATTTGGCAAGAGCACT	3840
Db	3900	TTATCATTTGAAGAAATAGCTTAAATATGACGTACCAAGATATATTTGGCAAGAGCACT	3959
QY	3841	CAGGAACATCACCTTAGTGAGAGAAACAAATGTTCTGCTACTGTTTCTTTCACAGTGC	3900
Db	3960	CAGGAACATCACCTTAGTGAGAGAAACAAATGTTCTGCTACTGTTTCTTTCACAGTGC	4019
QY	3901	AGTGAATTTGAAGAACTTGACTGCAAAATACAAACCCAGATCCCTTTCTTGATTGTTCT	3960
Db	4020	AGTGAATTTGAAGAACTTGACTGCAAAATACAAACCCAGATCCCTTTCTTGATTGTTCT	4079
QY	3961	TTCAAACAAATGAGCATCAGTCTGAAAGCCAGAGGAGTTGCTGTAGTGACAAAGAAATTG	4020
Db	4080	TTCAAACAAATGAGCATCAGTCTGAAAGCCAGAGGAGTTGCTGTAGTGACAAAGAAATTG	4139
QY	4021	GTTTCAGATGATGAAAGAAAGAGAAACGGGCTTGGAAAGAAATTAATCAAGAAAGACAAAGC	4080
Db	4140	GTTTCAGATGATGAAAGAAAGAGAAACGGGCTTGGAAAGAAATTAATCAAGAAAGACAAAGC	4199
QY	4081	ATGATTTCAAACTTAGTGTGAAGCAGCATCTGGGTGTGAGAGTGAAGAACAGCGTCTGAA	4140
Db	4200	ATGATTTCAAACTTAGTGTGAAGCAGCATCTGGGTGTGAGAGTGAAGAACAGCGTCTGAA	4259
QY	4141	GACTGCTCAGGGCTATCTCTTCAGAGTGAACATTTTAACCACTCAGAGAGGATATACCATG	4200
Db	4260	GACTGCTCAGGGCTATCTCTTCAGAGTGAACATTTTAACCACTCAGAGAGGATATACCATG	4319
QY	4201	CAACATTAACCTGATTTAAAGCTCCAGAGAGAAATGGCTGAATAGAAAGCTGTATTAGAACAG	4260
Db	4320	CAACATTAACCTGATTTAAAGCTCCAGAGAGAAATGGCTGAATAGAAAGCTGTATTAGAACAG	4379
QY	4261	CATGGGAGCCAGCCCTTCTTAACAGCACTACCCCTTCATCATTAAGTGACTCTTCGCCCTTGAG	4320
Db	4380	CATGGGAGCCAGCCCTTCTTAACAGCACTACCCCTTCATCATTAAGTGACTCTTCGCCCTTGAG	4439
QY	4321	GACCTGGCAATCCAGAAACAAAGCAGATCAGAAAAAGAGATTAATCTTCACAGAAAAAGT	4380
Db	4440	GACCTGGCAATCCAGAAACAAAGCAGATCAGAAAAAGAGATTAATCTTCACAGAAAAAGT	4499
QY	4381	AGTGAATACCCCTATTAAGCCCAAAATCCAAAGGCCCTTCTGCTGCAAGTTTGAAGTGTCT	4440
Db	4500	AGTGAATACCCCTATTAAGCCCAAAATCCAAAGGCCCTTCTGCTGCAAGTTTGAAGTGTCT	4559
QY	4441	GCAGATAGTTCTACAGATTAATAAAGAAACACAGAGAGTGAAGAGTCACTCCCTCTTAAA	4500
Db	4560	GCAGATAGTTCTACAGATTAATAAAGAAACACAGAGAGTGAAGAGTCACTCCCTCTTAAA	4619
QY	4501	TGCCATCATTTAGATGATAGGTGGTATCATGACAGTTGCTCTGGAGTCTTTCAGAAATAGA	4560
Db	4620	TGCCATCATTTAGATGATAGGTGGTATCATGACAGTTGCTCTGGAGTCTTTCAGAAATAGA	4679
QY	4561	AACATACCATCTCAAGAGAGCTCATTAAGTGTGTGATGTGGAGAGCAACAGCTGGAA	4620
Db	4680	AACATACCATCTCAAGAGAGCTCATTAAGTGTGTGATGTGGAGAGCAACAGCTGGAA	4739

4621 GAGTCTGGGGCCACAGATTGACGGAACATCTTACTTGCCCAAGGACAGATCTAGAGGA 4680
4740 GAGTCTGGGGCCACAGATTGACGGAACATCTTACTTGCCCAAGGACAGATCTAGAGGA 4799
4681 ACCCTTACCTGGAATCTGGAATCAGCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 4740
4800 ACCCTTACCTGGAATCTGGAATCAGCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 4859
4741 GAAGCAGAGCCCAAGAGTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 4800
4860 GAAGCAGAGCCCAAGAGTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 4919
4801 AAAGTTCCTCCCAATGGAAGTCTGCAAGATCTCCCAAGTCTCCCAAGTCTCCCAAGT 4860
4920 AAAGTTCCTCCCAATGGAAGTCTGCAAGATCTCCCAAGTCTCCCAAGTCTCCCAAGT 4979
4861 GATACCTGCTGGGTATATGCAATGGAAGATGTCAGCAGGAGAGAGCCAGAAATGACA 4920
4980 GATACCTGCTGGGTATATGCAATGGAAGATGTCAGCAGGAGAGAGCCAGAAATGACA 5039
4921 GCTTCACAGAAAGGCTCAACAAAAGATGTCATGCTGCTGCTGCTGCTGCTGCTGCTG 4980
5040 GCTTCACAGAAAGGCTCAACAAAAGATGTCATGCTGCTGCTGCTGCTGCTGCTGCTG 5099
4981 GAATTTATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 5040
5100 GAATTTATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 5159
5041 ACTGAAGAGACTACTCATGTTGTTATGAAAACAGATGCTGATGTTGTTGTTGTTGTTG 5100
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5220 CTGAATATTTTCTGAGGAATGCGGAGAGAAATGAGTATGTTGTTGTTGTTGTTGTTG 5279
5161 CAGTCTATTTAAAGAAAGAAATGCTGATGAGCATGATTTGAAATGAGAGAGATGTTG 5220
5280 CAGTCTATTTAAAGAAAGAAATGCTGATGAGCATGATTTGAAATGAGAGAGATGTTG 5339
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5341 GAATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 5400
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5520 GGCACAGGTGTCACCCCAATGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTG 5579
5461 TTCATGGAATTTGGGAGATGTTGAGGCACTTGTGTGAGACCCAGAGAGTGGTGTGAGC 5520
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5521 AGTGTACACCTCTACAGAGTCCAGAGAGTCCAGAGAGTCCAGAGAGTCCAGAGAGTCC 5580
5640 AGTGTACACCTCTACAGAGTCCAGAGAGTCCAGAGAGTCCAGAGAGTCCAGAGAGTCC 5699
5581 AGCCACTAC 5589
5700 AGCCACTAC 5708

RESULT 5
US-08-603-753D-1
; Sequence 1, Application US/08603753D

Patent No. 5891857
GENERAL INFORMATION:
APPLICANT: HOLT, JEFFREY T.
APPLICANT: JENSEN, ROY A.
APPLICANT: PAGE, DAVID L.
APPLICANT: KING, MARY-CLAIRE
APPLICANT: SZABO, CSILLA I.
APPLICANT: JETTTON, THOMAS L.
APPLICANT: ROBINSON-BENION, CHERYL L.
TITLE OF INVENTION: CHARACTERIZED BRCA1 AND BRCA2
TITLE OF INVENTION: PROTEINS AND SCREENING AND THERAPEUTIC METHODS BASED ON
TITLE OF INVENTION: CHARACTERIZED BRCA1 AND BRCA2 PROTEINS.
NUMBER OF SEQUENCES: 29
CORRESPONDENCE ADDRESS:
ADDRESSEE: ARLES A. TAYLOR, JR.
STREET: SUITE 1401, UNIVERSITY TOWER, 3100 TOWER
CITY: DURHAM
STATE: NORTH CAROLINA
COUNTRY: USA
ZIP: 27707
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.50 inch, 800 kb storage
COMPUTER: IBM PC/XT/AT compatible
OPERATING SYSTEM: Windows 3.1
SOFTWARE: WORD PERFECT 6.1 and ASCII
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/603,753D
FILING DATE: 20 FEB 1996
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: U.S. 08/373,799
FILING DATE: 17 JAN 1995
ATTORNEY/AGENT INFORMATION:
NAME: ARLES A. TAYLOR, JR.
REGISTRATION NUMBER: 39,395
REFERENCE/DOCKET NUMBER: 1242/2
TELECOMMUNICATION INFORMATION:
TELEPHONE: (919) 493-8000
TELEFAX: (919) 419-0383
TELEX:
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 5712
TYPE: nucleic acid
STRANDEDNESS: double
MOLECULE TYPE: linear
TOPOLOGY: linear
MOLECULE TYPE: CDNA to mRNA
HYPOTHETICAL: no
ANTI-SENSE: no
ORIGINAL SOURCE:
ORGANISM: Homo sapiens
INDIVIDUAL ISOLATE:
DEVELOPMENTAL STAGE: adult
TISSUE TYPE: female breast
CELL TYPE: ductal carcinoma in situ, invasive
CELL LINE: breast cancer and normal breast tissue
CELL LINE: not derived from a cell line
ORGANELLE: no
IMMEDIATE SOURCE:
LIBRARY: CDNA library derived from human
CLONE: obtained using published sequence
POSITION IN GENOME:
CHROMOSOME/SEGMENT: unknown
MAP POSITION: unknown
UNITS: unknown
FEATURE:
NAME/KEY: BRCA1
LOCATION: GenBank accession no. U14680
IDENTIFICATION METHOD: microscopically directed
IDENTIFICATION METHOD: sampling and nuclease protection assay
OTHER INFORMATION: gene encoding BRCA1 protein

PUBLICATION INFORMATION:
AUTHORS: Miki, Y., et. al.
TITLE: A strong candidate gene for the breast and
ovarian cancer susceptibility gene BRCA1.
JOURNAL: Science
VOLUME: 286
PAGES: 66-71
DATE: 1994
RELEVANT RESIDUES IN SEQ ID NO: 1:
US-08-603-753D-1

Query Match 99.9%; Score 5585.8; DB 2; Length 5712;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 5587; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

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QY 1021 GATCTGATGCTGATCCCTCTGTGAGAGAAAAAAGATGAATTAAGCAAAATCTCCATGC 1080
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DB 1440 ATATGTAAGTGAAGAGTCTACTCCAAATCAGTATGAGATTAATTTGAAGACAAATA 1499
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DB 1500 TTTGGAAACCTATCGAGAGAGAGGAGGCTCCCACTTAACGATTAATTTGAAGAAAT 1559
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DB 1560 CTAATTTATAGAGATTTGTTACTGAGCAGACAGATTAATTAAGAGGCTCCCTCACAAT 1619
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DB 1620 AAATTTAAAGCGTAAAGAGAGCTTACATCAGAGCTTCACTCTGAGATTTTATCAAGAAA 1679
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QY 1621 CAGATGCTCAAGTATGATTAATTAATTAATGATGATGATGATGATGATGATGATGAT 1680
DB 1740 CAGATGCTCAAGTATGATTAATTAATTAATGATGATGATGATGATGATGATGATGAT 1799
QY 1681 TCTATTTGAGATGAGAAAAATCTTAACCAATTAATTAATTAATTAATTAATTAATTAAT 1740
DB 1800 TCTATTTGAGATGAGAAAAATCTTAACCAATTAATTAATTAATTAATTAATTAATTAAT 1859
QY 1741 AAAAGGAAAGCTGAGATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAAT 1800
DB 1860 AAAAGGAAAGCTGAGATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAAT 1919
QY 1801 CACAATTTCAAAAGCACTTAATTAATTAATTAATTAATTAATTAATTAATTAATTAAT 1860
DB 1920 CACAATTTCAAAAGCACTTAATTAATTAATTAATTAATTAATTAATTAATTAATTAAT 1979
QY 1861 CATGCGCTTGAATAGTATGATGATTAATTAATTAATTAATTAATTAATTAATTAATTAAT 1920
DB 1980 CATGCGCTTGAATAGTATGATGATTAATTAATTAATTAATTAATTAATTAATTAATTAAT 2039
QY 1921 ATTTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1980
DB 2040 ATTTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 2099
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QY	2041	AGTACAAAGCCAAATGAAACAGACAAAGTAAAGACATGACATGATCTCTCCAGAGCTG	2100
Db	2160	AGTACAAAGCCAAATGAAACAGACAAAGTAAAGACATGACATGACATCTCTCCAGAGCTG	2219
QY	2101	AAGTTAACAAATGCAACCTGCTCTTTTACTAAGTGTTCAAATATACCAGTGAACCTAAAGAA	2160
Db	2220	AAGTTAACAAATGCAACCTGCTCTTTTACTAAGTGTTCAAATATACCAGTGAACCTAAAGAA	2279
QY	2161	TTTGTCAATCCTACCTCTCCAAAGAGAGAAAAAAGAGAAACTTGAACAGTTAAAGT	2220
Db	2280	TTTGTCAATCCTACCTCTCCAAAGAGAGAAAAAAGAGAAACTTGAACAGTTAAAGT	2339
QY	2221	TCTAATAATGCTGAAGAACCCCAAGATCTCATGTTAAAGTGAAGAAAGGTTTCCAACT	2280
Db	2340	TCTAATAATGCTGAAGAACCCCAAGATCTCATGTTAAAGTGAAGAAAGGTTTCCAACT	2399
QY	2281	GAAAGATCTGTAGAGAGTACGAGTATTTCAATTTGCTACCTGGTACTGATTATGCACTGAG	2340
Db	2400	GAAAGATCTGTAGAGAGTACGAGTATTTCAATTTGCTACCTGGTACTGATTATGCACTGAG	2459
QY	2341	GAAAGTATCTGTTACTAGCGAGTTTAAAGCCTCTAGGAAAGGCAAAACAGAACCAATTA	2400
Db	2460	GAAAGTATCTGTTACTAGCGAGTTTAAAGCCTCTAGGAAAGGCAAAACAGAACCAATTA	2519
QY	2401	TGTGTGAGTCAGTGTGCAGCATTTTGAAAAACCCCAAGGACTAATTCATGTGTGTCCAA	2460
Db	2520	TGTGTGAGTCAGTGTGCAGCATTTTGAAAAACCCCAAGGACTAATTCATGTGTGTCCAA	2579
QY	2461	GATATATGAATGACACAGAGCGCTTAAAGTATCCATTTGGACATGSAAGTTAAACCACT	2520
Db	2580	GATATATGAATGACACAGAGCGCTTAAAGTATCCATTTGGACATGSAAGTTAAACCACT	2639
QY	2521	CGGGAACCAACACATAGAAATGGAAGAAAGTAACTGATGCTCAGTATTTGCAGAAATACA	2580
Db	2640	CGGGAACCAACACATAGAAATGGAAGAAAGTAACTGATGCTCAGTATTTGCAGAAATACA	2699
QY	2581	TTCAAGGTTTCAAAAGCGCCAGTCAATTGCTCTGTTTCAAAATCCAGAAATGCAAGAG	2640
Db	2700	TTCAAGGTTTCAAAAGCGCCAGTCAATTGCTCTGTTTCAAAATCCAGAAATGCAAGAG	2759
QY	2641	GAATGTGCAACATTTCTGCGCCACCTGCGGGTCTTTAAAGAAACAAAGTCCAAAAGTACT	2700
Db	2760	GAATGTGCAACATTTCTGCGCCACCTGCGGGTCTTTAAAGAAACAAAGTCCAAAAGTACT	2819
QY	2701	TTTGAATGTGAACAAAGGAAGAAATCAAGGAAGAATGAGTAAATATCAACGCTGTA	2760
Db	2820	TTTGAATGTGAACAAAGGAAGAAATCAAGGAAGAATGAGTAAATATCAACGCTGTA	2879
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Db	2880	CAGACAGTAAATATCATCTGCAGCGCTTCCTGCTGGTTGGTCAAGAAAGTAAAGCCAGTTGAT	2939
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Db	2940	AATGCAAAATGTAGTATCAAAAGAGGCGTCAATGATTTGTCTATATCTCAGTTACAGAGC	2999
QY	2881	AACGAAACTGGACATCTATTACTCCAAATTAACATGGAATTTTACAAACCCATATGTA	2940
Db	3000	AACGAAACTGGACATCTATTACTCCAAATTAACATGGAATTTTACAAACCCATATGTA	3059
QY	2941	CCACACACTTTTCCCATCAAGTCAATTTGTTTAAACTTAAATGTAGAAAAATCTGCTGAG	3000
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QY	3001	GAAAACCTTTGAGAACATTCATGTCACCTGAAAGAGAAATGGGAAATGAGAACATTTCA	3060
Db	3120	GAAAACCTTTGAGAACATTCATGTCACCTGAAAGAGAAATGGGAAATGAGAACATTTCA	3179

QY	3061	AGTACAGTGAACCAATTACCGCTATATACATTAGAGAAATGTTTTAAAGACCGACG	3120
Db	3180	AGTACAGTGAACCAATTACCGCTATATACATTAGAGAAATGTTTTAAAGACCGACG	3239
QY	3121	TCACCAATATTAATGAAGTGAAGTCCAGTACTATGAAGTGGGCTCCAGATTAATGCA	3180
Db	3240	TCACCAATATTAATGAAGTGAAGTCCAGTACTATGAAGTGGGCTCCAGATTAATGCA	3299
QY	3181	ATAGGTTCCAGTATGAAGAAACATTCACACAGAACAGTGTAGAACAGAGGGCCAAATTG	3240
Db	3300	ATAGGTTCCAGTATGAAGAAACATTCACACAGAACAGTGTAGAACAGAGGGCCAAATTG	3355
QY	3241	AATGCTATGCTTAGATTAGGAGTTTGCACCTGAGTCTATAACAAAGTCTTCGGA	3300
Db	3360	AATGCTATGCTTAGATTAGGAGTTTGCACCTGAGTCTATAACAAAGTCTTCGGA	3419
QY	3301	AGTATTTGAGCACTCGTAAATTAAGAAAGCAAGATATGAAGATAGTTCAAGCTCTT	3366
Db	3420	AGTATTTGAGCACTCGTAAATTAAGAAAGCAAGATATGAAGATAGTTCAAGCTCTT	3479
QY	3361	AATACAGATTTCTCCATATCTGATTCAGATACTAGAACAGCCATGAGGAATAGT	3420
Db	3480	AATACAGATTTCTCCATATCTGATTCAGATACTAGAACAGCCATGAGGAATAGT	3539
QY	3421	CATGCACTCGAGTTTGTCTGAGACACCTGATGACCTGTATAGATGATGTGAATAAG	3480
Db	3540	CATGCACTCGAGTTTGTCTGAGACACCTGATGACCTGTATAGATGATGTGAATAAG	3599
QY	3481	GAAGTACTAGTTTTGCTGAATAATGACATTAAAGAAATTTCTGCTGTTTTAGCAAAAGC	3540
Db	3600	GAAGTACTAGTTTTGCTGAATAATGACATTAAAGAAATTTCTGCTGTTTTAGCAAAAGC	3655
QY	3541	GTCCAGAAAGGAGACTTACGACAGAGTCTTACGCCCTTCACCCATACATTGGCTCAG	3600
Db	3660	GTCCAGAAAGGAGACTTACGACAGAGTCTTACGCCCTTCACCCATACATTGGCTCAG	3719
QY	3601	GATTACCGAAGAGGGGCCAAGAAATTAGAGTCTCCAGAGAACTTATCTAGTAGAGAT	3660
Db	3720	GATTACCGAAGAGGGGCCAAGAAATTAGAGTCTCCAGAGAACTTATCTAGTAGAGAT	3779
QY	3661	GAAAGCTTCCCTGCTTCCAAACACTTGTATTGGTAAAGTAAACATATACCTTCTCAG	3720
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Db	3960	CAGGAACATCACCTTAGTGAAGAAACAAATGTTCTGCTACCTGTTTCTTCACAGTGC	4019
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Db	4020	AGTGAATTTGAAGACTTACTGTCGCAAAATCAAAACCCAGGATCCCTTCTATATGGTCT	4079
QY	3961	TCCAAAACAAATGAGGCATCAGTCTGAAAGCCAGGAGTTGGTCTGAGTGAACGAATTG	4020
Db	4080	TCCAAAACAAATGAGGCATCAGTCTGAAAGCCAGGAGTTGGTCTGAGTGAACGAATTG	4139
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Db	4140	GTTTCAGATGATGAAGAAAGAGAACGGGCTTGGAGAAATTAATCAAGAGACAAAGC	4199
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QY	4141	GACTGCTCAGGAGCTATCCTCTCAAGTGAACATTTTAAACACTCAGACAGAGGATACCATG	4200

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Db 4260 GACGCTCAGGCGATCTCTCAGAGTGCATTTTACCACCTCAGGAGGATACCAG 4319
QY 4201 CAACATACTGATTAAGCTCCAGCAGAAATGGTGAATAGAAAGCTGTAGAACG 4260
Db 4320 CAACATACTGATTAAGCTCCAGCAGAAATGGTGAATAGAAAGCTGTAGAACG 4379
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QY 5521 AGTGAAGACTCTACAGTCCAGAGAGCTGAGACACTGATATACCCAGATCCCCAC 5580
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QY 5581 AGCCACTAC 5589
Db 5700 AGCCACTAC 5708
RESULT 6
US-09-099-753-1
Sequence 1, Application US/0909753
GENERAL INFORMATION:
APPLICANT: HOLT, JEFFREY T.
APPLICANT: JENSEN, ROY A.
APPLICANT: PAGE, DAVID L.
APPLICANT: KING, MARY-CLAIRE
APPLICANT: SZABO, CSILLA I.
APPLICANT: JETTTON, THOMAS L.
APPLICANT: ROBINSON-BENION, CHERYL L.
APPLICANT: THOMPSON, MARILYN E.
TITLE OF INVENTION: CHARACTERIZED BRCA1 AND BRCA2
TITLE OF INVENTION: PROTEINS AND SCREENING AND THERAPEUTIC METHODS BASED ON
NUMBER OF SEQUENCES: 29
CORRESPONDENCE ADDRESS:
ADDRESSER: ARLES A. TAYLOR, JR.
STREET: SUITE 1401, UNIVERSITY TOWER, 3100 TOWER
STREET: BOULEVARD
CITY: DURHAM
STATE: NORTH CAROLINA
COUNTRY: USA
ZIP: 27707
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.50 inch, 800 kb storage
COMPUTER: IBM PC/XT/AT compatible
OPERATING SYSTEM: Windows 3.1
SOFTWARE: WORD PERFECT 6.1 and ASCII
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/099,753
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/603,753
FILING DATE: 20 FEB 1996
APPLICATION NUMBER: U.S. 08/373,799
FILING DATE: 17 JAN 1995
ATTORNEY/AGENT INFORMATION:
NAME: ARLES A. TAYLOR, JR.
REGISTRATION NUMBER: 39,395
REFERENCE/DOCKET NUMBER: 1242/2
TELECOMMUNICATION INFORMATION:
TELEPHONE: (919) 493-8000
TELEFAX: (919) 419-0383

TELEX:
: INFORMATION FOR SEQ ID NO: 1:
: SEQUENCE CHARACTERISTICS:
: LENGTH: 5712
: TYPE: nucleic acid
: STRANDEDNESS: double
: TOPOLOGY: linear
: MOLECULE TYPE: cDNA to mRNA
: HYPOTHEICAL: no
: ANTI-SENSE: no
: ORIGINAL SOURCE:
: ORGANISM: Homo sapiens
: INDIVIDUAL ISOLATE:
: DEVELOPMENTAL STAGE: adult
: TISSUE TYPE: female breast
: CELL TYPE: ductal carcinoma in situ, invasive
: CELL LINE: breast cancer and normal breast tissue
: CELL LINE: not derived from a cell line
: ORGANELLE: no
: IMMEDIATE SOURCE:
: LIBRARY: cDNA library derived from human
: CLONE: obtained using published sequence
: POSITION IN GENOME:
: CHROMOSOME/SEGMENT: unknown
: MAP POSITION: unknown
: UNITS: unknown
: FEATURE:
: NAME/KEY: BRCA1
: LOCATION: Genbank accession no. U14680
: IDENTIFICATION METHOD: microscopicallydirected
: IDENTIFICATION METHOD: sampling and nuclease protection assay
: OTHER INFORMATION: gene encoding BRCA1 protein
: PUBLICATION INFORMATION:
: AUTHORS: Miki, Y., et al.
: TITLE: A strong candidate gene for the breast and
: TITLE: ovarian cancer susceptibility gene BRCA1.
: JOURNAL: Science
: VOLUME: 266
: PAGES: 66-71
: DATE: 1994
: RELEVANT RESIDUES IN SEQ ID NO: 1:
: US-09-099-753-1

Query Match 99.9%; Score 5585.8; DB 3; Length 5712;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 5587; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

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QY 361 GAAGTTTCTATCATCCAAAGTATGGGTACAGAAACCGTCCAAAGACTTTCACAGAT 420
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Db 480 GAAGTTTCTATCATCCAAAGTATGGGTACAGAAACCGTCCAAAGACTTTCACAGAT 539
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Db 540 GAACCCCAAAATCTTCTTCTGAGAGAACAGTCTAGTGTCCAACTCTTAACCTTGA 599
QY 481 ACTGTGAACTCTGAGAGAACAGTCTAGTGTCCAACTCTTAACCTTGA 540
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Db 960 AGCTCATATACAGATGAGAACAGAGTTTATTAATCTACTAAGACAGAAATGATGAA 1019
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Db 1440 ATATGTAAGTGAAGAGTCTCAATTCAGATGATGATGATGATGATGATGATGATGATGAT 1499
QY 1381 TTTGGGAAACCTATCGAGAGAGGCAAGCTCCCACTTAAAGCCATGTAACTGAAAT 1440
Db 1500 TTTGGGAAACCTATCGAGAGAGGCAAGCTCCCACTTAAAGCCATGTAACTGAAAT 1559
QY 1441 CTAAATATAGAGCAATTTGTACTGAGCAGATTAATACAGAGCGTCCCTTCACAAAT 1500
Db 1560 CTAAATATAGAGCAATTTGTACTGAGCAGATTAATACAGAGCGTCCCTTCACAAAT 1619

QY	1501	AAATTAAAGCGTAAAAAGGAGACCTACATCAGCCCTTCATCTGAGGATTTTATCAAGAA	1560
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Db	1680	GCAGATTGGCGCTCAAAAGACCTCCTGAAATGATAATCAGGGAACTAACCAAGCGAG	1739
QY	1621	CAGAAVGGTCAAGTATGATATTACTAATAGTGGTCATGAGAAATAAACAAAGTGAT	1680
Db	1740	CAGAAVGGTCAAGTATGATATTACTAATAGTGGTCATGAGAAATAAACAAAGTGAT	1799
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Db	1800	TCTATTTCGAATGAGAAAAAATCCTAACCCATAGAAATACATCGAAAAAAGAAATCGCTTTC	1859
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QY	1801	CACAAATTCAAAAAGCACCTAAAAAGAAATAGCGGAGAGAAAGTCTTCAACAGCAATTT	1866
Db	1920	CACAAATTCAAAAAGCACCTAAAAAGAAATAGCGGAGAGAAAGTCTTCAACAGCAATTT	1979
QY	1861	CATCGCGCTTGAACCTAGTAGTCAGTAGAAATCTAAGCCCACTAATTTACTGAATTCGAA	1920
Db	1980	CATCGCGCTTGAACCTAGTAGTCAGTAGAAATCTAAGCCCACTAATTTACTGAATTCGAA	2039
QY	1921	ATTGTAATGTTGTTCTAGCAGATGAGAGATTAAGAAAAAAGATACCAATGCGACATC	1980
Db	2040	ATTGTAATGTTGTTCTAGCAGATGAGAGATTAAGAAAAAAGATACCAATGCGACATC	2099
QY	1981	AGGCACAGCAGAAACCTCAACTCATGGAAGGTAAAGAACTGCACATCGAGCCAAAG	2040
Db	2100	AGGCACAGCAGAAACCTCAACTCATGGAAGGTAAAGAACTGCACATCGAGCCAAAG	2159
QY	2041	AGTAACAAGCCAAATGAACAGACAAAGTAAAAAGACATGACAGCATCTTCCAGAGCTG	2100
Db	2160	AGTAACAAGCCAAATGAACAGACAAAGTAAAAAGACATGACAGCATCTTCCAGAGCTG	2219
QY	2101	AAGTTAAACAAATGACACCTGGTTCCTTTACTAAGTGTCAATTAACAGGAACCTAAAGAA	2160
Db	2220	AAGTTAAACAAATGACACCTGGTTCCTTTACTAAGTGTCAATTAACAGGAACCTAAAGAA	2279
QY	2161	TTTGTCAATCCTAGCCCTTCCAAGAGAGAAAAAGAAAGAACTAGAAACAAGTTAAAGTG	2220
Db	2280	TTTGTCAATCCTAGCCCTTCCAAGAGAGAAAAAGAAAGAACTAGAAACAAGTTAAAGTG	2339
QY	2221	TCTAATTAATGCGAAGAACCCCAAGATCTCATGTAATGAGAAAGGGTTTGCAACT	2280
Db	2340	TCTAATTAATGCGAAGAACCCCAAGATCTCATGTAATGAGAAAGGGTTTGCAACT	2399
QY	2281	GAAAGATCTGTAGAGAGTAGAGCATTTTTCATTTGCTAGCTGGTACTGATATAGGACCTAG	2340
Db	2400	GAAAGATCTGTAGAGAGTAGAGCATTTTTCATTTGCTAGCTGGTACTGATATAGGACCTAG	2459
QY	2341	GAAAGATCTGTTCTCTGGAAGTTAGCACTCTAGGGAAGGCAAAAAACGAACCAATATA	2400
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Db	2520	TGTGTGAGTCAAGTGGCAGCAATTTGAAAAACCCCAAGGACATTAATTCATGTTGTTCCAAA	2579
QY	2461	GATAATAGAAATGACACAGAAAGGCTTTAAGTATCCATTGGGACATGAAGTTAACACAGT	2520
Db	2580	GATAATAGAAATGACACAGAAAGGCTTTAAGTATCCATTGGGACATGAAGTTAACACAGT	2639
QY	2521	CGGGAACACACATAGAAATGGAAGAAAGTGAATCTGATGCTCAGATATTTCACAATATCA	2580
Db	2640	CGGGAACACACATAGAAATGGAAGAAAGTGAATCTGATGCTCAGATATTTCACAATATCA	2699

Qy	2581	TTTCAGGTTTCAAACGCCAGCATTTGCTGCTTTTCAAATCCAGAAATGCGAGAA	2640
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Db	2760	GAATGTGCAACATCTCTGCCACCTCTGGTCTTTAAAGAAACAAGTCCAAAGTCA	2819
Qy	2701	TTTGAATGTGAACAAAGAGAGAAATCAAGAAAGATGAGTCTAATATCAAGCTGTA	2760
Db	2820	TTTGAATGTGAACAAAGAGAGAAATCAAGAAAGATGAGTCTAATATCAAGCTGTA	2879
Qy	2761	CAGACAGTTAATATCATCTGACAGCTTTCTCTGGTGGTGGTCAAGAAAGATTAACCA	2820
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Db	3000	AACGAAATCGGACTCATTTACTCCAAATTAACATGTGACTTTTACAAACCCATATCGTATA	3059
Qy	2941	CCACACATTTTCCCATCAAGTCATTTGTTAAACTAAATGTAGAAAAATCTGCTAGAG	3000
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Qy	3001	GAATCTTTGAGGAACATTCATATGCTACCTGGAAGAGAAATGGGAAATGAGAACATTTCA	3060
Db	3120	GAATCTTTGAGGAACATTCATATGCTACCTGGAAGAGAAATGGGAAATGAGAACATTTCA	3179
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Db	3240	TCAACCAATATTAAATGAAGTAGGTTCCAGTACTAATGAATGGGCTCCAGTATTATGAA	3299
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Qy	3301	AGTATTTGTAACATCTGTAATTAAGCAAGCAATGTGAAGAAAGTGTCCAGACTGT	3360
Db	3420	AGTATTTGTAACATCTGTAATTAAGCAAGCAATGTGAAGAAAGTGTGTCCAGACTGT	3479
Qy	3361	AATACAGATTTCTCTCCATATCTGATTTCAAGTAACATAGAAACAGCCTATGGGAATGAT	3420
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Qy	3421	CATGATCTCAGGTTTGTGTGAGACACCTGATGCTGCTTAAGATGATGGGAATTAAG	3480
Db	3540	CATGATCTCAGGTTTGTGTGAGACACCTGATGCTGCTTAAGATGATGGGAATTAAG	3599
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4680 AACTRACCATCTCAAGAGAGAGCTCATTAAGTTGTGTGAGAGAGCAACAGCTGAA 4739
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RESULT 7
US-08-986-106-1
: Sequence 1, Application us/08986106
: Patent No. 6177410
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: GENERAL INFORMATION:
: APPLICANT: HOLT, JEFFREY T.
: APPLICANT: JENSEN, ROY A.
: APPLICANT: KING, MARY-CLAIRE
: APPLICANT: STEINER, MITCHELL S.
: APPLICANT: ROBINSON-BENION, CHERYL L.
: APPLICANT: THOMPSON, MARILYN E.
: TITLE OF INVENTION: THERAPEUTIC METHODS FOR
: PROSTATE CANCER
: NUMBER OF SEQUENCES: 26

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Db 4800 ACCCTTACCTGGAATCTGGAATAGCCTTCTCTGATGACCTGGAATCTGATCTTCT 4859

Qy 4741 GAAGACAGAGCCCGAGAGTCAAGCTGTGTGGCAACATACCATCTTCAACCTCTGATTTG 4800
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Db 5460 GAATGAGTGTACAGCTGT 5519
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RESULT 8
US-09-007-678B-47
: Sequence 47, Application us/09007678B
: Patent No. 6342483
: GENERAL INFORMATION:
: APPLICANT: HOLT, JEFFREY T.
: APPLICANT: JENSEN, ROY A.
: APPLICANT: PAGE, DAVID L.
: APPLICANT: OBERMILLER, PATRICE S.
: APPLICANT: ROBINSON-BENION, CHERYL L.
: APPLICANT: THOMPSON, MARILYN E.

FILE REFERENCE: METHOD FOR DETECTION AND TREATMENT OF BREAST CANCER
CURRENT APPLICATION NUMBER: US/09/007,678B
CURRENT FILING DATE: 1998-01-15
PRIORITY APPLICATION NUMBER: 08/373,799
PRIORITY FILING DATE: 1995-01-17
PRIORITY APPLICATION NUMBER: 08/182,961
PRIORITY FILING DATE: 1994-01-14
NUMBER OF SEQ ID NOS: 61
SOFTWARE: Microsoft Wordpad
SEQ ID NO 47
LENGTH: 5712
TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: CDS
LOCATION: (120)..(5708)
NAME/KEY: misc_feature
LOCATION: (4532)..(4535)
OTHER INFORMATION: Xaa-any amino acid
US-09-007-678B-47

Query Match 99.9%; Score 5585.8; DB 4; Length 5712;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 5587; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

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DB 120 ATGGATTATCTCTCTCTGCGCTTGAAGAGTACAAATGCTATATGCTATGCAAAA 179
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QY 181 TGTCCTTATGTAAGATGATATACCAAGAGAGGCTTCACAAAGTATGATTTAGT 240
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QY 241 CAACCTGTGAAAGGATGATGAAATCATTTGCTTTGAGCTTGACACAGGTTGGAG 300
DB 360 CAACCTGTGAAAGGATGATGAAATCATTTGCTTTGAGCTTGACACAGGTTGGAG 419
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QY 3241 AATGCTATGCTTAATTAAGGGGTTTTCACACCTGAGGCTTATAAACAAGTCTTCTGTGA 3300
| | | | |
Db 3360 AATGCTATGCTTAATTAAGGGGTTTTCACACCTGAGGCTTATAAACAAGTCTTCTGTGA 3419
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QY 3301 AGTAAATGTGAACATCTGAAATTAAGAAACCAAGAAATATGAAGAGTTCAGACGTTT 3360
| | | | |
Db 3420 AGTAAATGTGAACATCTGAAATTAAGAAACCAAGAAATATGAAGAGTTCAGACGTTT 3479
| | | | |
QY 3361 AATACAGATTTCTCCATATCTGATTTCAAGATTAAGTACAGACGCTATGAGAGTACT 3420
| | | | |
Db 3480 AATACAGATTTCTCCATATCTGATTTCAAGATTAAGTACAGACGCTATGAGAGTACT 3539
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QY 3421 CATGATCTCAGGTTTGTGTGAGACACCGATGACCTGTATGATGAGTGAATTAAG 3480
| | | | |
Db 3540 CATGATCTCAGGTTTGTGTGAGACACCGATGACCTGTATGATGAGTGAATTAAG 3599
| | | | |
QY 3481 GAAGATCTAGTTTGTGTAAGATTAAGCAATTAAGAAAGTCTGCTTTTATGCAAAAC 3540
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Db 3600 GAAGATCTAGTTTGTGTAAGATTAAGCAATTAAGAAAGTCTGCTTTTATGCAAAAC 3659
| | | | |
QY 3541 GTCCAGAAAGAGAGCTTACAGAGAGTCTTACGCCCTTTTACCCATACACATTTGGCTCAG 3600
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Db 3660 GTCCAGAAAGAGAGCTTACAGAGAGTCTTACGCCCTTTTACCCATACACATTTGGCTCAG 3719
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QY 3601 GGTACCGAAGAGAGGCGCAAGAAATTAAGTACCTCAGAAAGAACTTATCTAGTGAAGAT 3660
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Db 3720 GGTACCGAAGAGAGGCGCAAGAAATTAAGTACCTCAGAAAGAACTTATCTAGTGAAGAT 3779
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QY 3661 GAAGAGCTTCCCTGCTTCCAAACACTTGTATTTGTGAAGTAAACATAATACCTTCTCAG 3720
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| | | | |
QY 3721 TCTACTAGCAGTACAGCAGTGTGCTTACCGAGTGTCTGTAAAGAACACAGAGAAATTTA 3780
| | | | |
Db 3840 TCTACTAGCAGTACAGCAGTGTGCTTACCGAGTGTCTGTAAAGAACACAGAGAAATTTA 3899
| | | | |
QY 3781 TTATCATTTGAAGATTAAGTAAATGAGTACAGTGAAGTGAAGTGAAGTGAAGTGAAGTGAAG 3840
| | | | |
Db 3900 TTATCATTTGAAGATTAAGTAAATGAGTACAGTGAAGTGAAGTGAAGTGAAGTGAAGTGAAG 3959
| | | | |
QY 3841 CAGGAACATCACTTACGTAGAGAAACAAATGTTTGTAGTGTGTTTCTTACAGTGC 3900
| | | | |
Db 3960 CAGGAACATCACTTACGTAGAGAAACAAATGTTTGTAGTGTGTTTCTTACAGTGC 4019
| | | | |
QY 3901 AGTGAATTTGAGAGCTTACTGCAAAATTAACAACACCCAGAGTCTTTCTGATTTGTTCT 3960
| | | | |
Db 4020 AGTGAATTTGAGAGCTTACTGCAAAATTAACAACACCCAGAGTCTTTCTGATTTGTTCT 4079
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QY 3961 TCCAAACAAATGAGGATCAAGTCTGAAAGCCAGAGGAGTTGTCTGAGTACCAAGAAATTTG 4020
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APPLICATION NUMBER: US 08/409,305
 FILING DATE: 24-MAR-1995
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/348,824
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 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/308,104
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 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/300,266
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 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/289,221
 FILING DATE: 12-AUG-1994
 ATTORNEY/AGENT INFORMATION:
 NAME: Ihnen, Jeffrey L.
 REGISTRATION NUMBER: 28,957
 REFERENCE/DOCKET NUMBER: 24884-109347
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: 202-962-4810
 TELEFAX: 202-962-8300
 INFORMATION FOR SEQ ID NO: 1:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 5914 base pairs
 TYPE: nucleic acid
 STRANDEDNESS: double
 TOPOLOGY: linear
 MOLECULE TYPE: cDNA
 HYPOTHETICAL: NO
 ANTI-SENSE: NO
 ORIGINAL SOURCE:
 ORGANISM: Homo sapiens
 FEATURE:
 NAME/KEY: CDS
 LOCATION: 120..5711
 US-08-480-784-1

Query Match 99.9%; Score 5585.8; DB 1; Length 5914;
 Best Local Similarity 100.0%; Pred. No. 0;
 Matches 5587; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 ATGATTTATCTGCTCTCGCGTTGAGAGATACAAATGCTTAATGCTTATGAGAAA 60
 DB 120 ATGATTTATCTGCTCTCGCGTTGAGAGATACAAATGCTTAATGCTTATGAGAAA 179
 QY 61 ATCTTAGAGTGTCCCATCTGTCTGAGTTGATCAAGAAACCTGTCCACAAAGTGTGAC 120
 DB 180 ATCTTAGAGTGTCCCATCTGTCTGAGTTGATCAAGAAACCTGTCCACAAAGTGTGAC 239
 QY 121 CACATATTTTGCATATTTTGCATGCTGAAACTTCTCAACCAAGAAAGGGCTTCACAG 180
 DB 240 CACATATTTTGCATATTTTGCATGCTGAAACTTCTCAACCAAGAAAGGGCTTCACAG 299
 QY 181 TGTCTTATATGAAGATGATATACCAAAAGAGCTACAAAGAAAGTACAGATTAGT 240
 DB 300 TGTCTTATATGAAGATGATATACCAAAAGAGCTACAAAGAAAGTACAGATTAGT 359
 QY 241 CACATTGTGAAGACATATGAAGAAATCAATTTGTCTTTCACCTTGACACAGGTTTGAG 300
 DB 360 CACATTGTGAAGACATATGAAGAAATCAATTTGTCTTTCACCTTGACACAGGTTTGAG 419
 QY 301 TATCAAAACAGCTTAATTTTGCACAAAAGAAATTAATCTCTCCGAAACATCTAAAGAT 360
 DB 420 TATCAAAACAGCTTAATTTTGCACAAAAGAAATTAATCTCTCCGAAACATCTAAAGAT 479
 QY 361 GAATTTCTATCATCAAAAGATGAGTACAGAAACCTGCCAAAAGACTTCTACAGAGT 420
 DB 480 GAATTTCTATCATCAAAAGATGAGTACAGAAACCTGCCAAAAGACTTCTACAGAGT 539
 QY 421 GAACCCGAAAAATCTCTCTGACAGAAACAGAGTCACTGTCACAACTCTTAACCTTGA 480
 DB 540 GAACCCGAAAAATCTCTCTGACAGAAACAGAGTCACTGTCACAACTCTTAACCTTGA 599

QY 481 ACTGTGAGAACTGTGAGGACAAAGCAGGAGATACAACTCAAAAGAGCTGTCTACATT 540
 DB 600 ACTGTGAGAACTGTGAGGACAAAGCAGGAGATACAACTCAAAAGAGCTGTCTACATT 659
 QY 541 GAATGGGATCTGATTTCTTCTGAAGATACCGTTAATAGGCAACTTATGTGAGTGGGA 600
 DB 660 GAATGGGATCTGATTTCTTCTGAAGATACCGTTAATAGGCAACTTATGTGAGTGGGA 719
 QY 601 GATCAAGAAATTTTCAAAATCACCCCTCAAGAACAGGATGAATATGATGATTTCT 660
 DB 720 GATCAAGAAATTTTCAAAATCACCCCTCAAGAACAGGATGAATATGATGATTTCT 779
 QY 661 GCAAAAAAGGCTGCTTGTGAATTTTCTGAGACGAGATGTAACAAATCTGAACATCATCA 720
 DB 780 GCAAAAAAGGCTGCTTGTGAATTTTCTGAGACGAGATGTAACAAATCTGAACATCATCA 839
 QY 721 CCCAGTAATTAATGATTTTGAACACCACTGAGAAAGGCTGAGTGAAGGATCCGAAAG 780
 DB 840 CCCAGTAATTAATGATTTTGAACACCACTGAGAAAGGCTGAGTGAAGGATCCGAAAG 899
 QY 781 TATCAGGGTAGTTCTGTTTCAAACTGATGTGAGCCATGTGACAAATACATCATGCC 840
 DB 900 TATCAGGGTAGTTCTGTTTCAAACTGATGTGAGCCATGTGACAAATACATCATGCC 959
 QY 841 ACCCTATTACAGCATGAGAACAGCAGTTTATTCTCACTAAGACAGATGATGAGAA 900
 DB 960 ACCCTATTACAGCATGAGAACAGCAGTTTATTCTCACTAAGACAGATGATGAGAA 1019
 QY 901 AAGGCTGAATCTGTATTAATAAAGCAAAAGCTGTGAGAGGACCAACATTAACAGA 960
 DB 1020 AAGGCTGAATCTGTATTAATAAAGCAAAAGCTGTGAGAGGACCAACATTAACAGA 1079
 QY 961 TGGGCTGAGAAAGTAAGAAACATGTAATGATAGGGGAGATCCACAGAGAAAAAGGTA 1020
 DB 1080 TGGGCTGAGAAAGTAAGAAACATGTAATGATAGGGGAGATCCACAGAGAAAAAGGTA 1139
 QY 1021 GATCTGAATGCTGATCCCTGTGTGAGAGAAATGGAATTAAGCAAAAGTCCATGC 1080
 DB 1140 GATCTGAATGCTGATCCCTGTGTGAGAGAAATGGAATTAAGCAAAAGTCCATGC 1199
 QY 1081 TCAGAGAAATCCAGAGATGATGAGATGTTCTTGATTAACATTAATAGAGATTCAG 1140
 DB 1200 TCAGAGAAATCCAGAGATGATGAGATGTTCTTGATTAACATTAATAGAGATTCAG 1259
 QY 1141 AAAAGTTAATGAGTGTCTTCCAGAAAGTATGATGTTAGTTGTGATGACTACATGAT 1200
 DB 1260 AAAAGTTAATGAGTGTCTTCCAGAAAGTATGATGTTAGTTGTGATGACTACATGAT 1319
 QY 1201 GGGGAGTCTGAATCAAAATGCCAAAGTACGTATGTTGACGTTCTTAATAGAGTATGAT 1260
 DB 1320 GGGGAGTCTGAATCAAAATGCCAAAGTACGTATGTTGACGTTCTTAATAGAGTATGAT 1379
 QY 1261 GAATTAATGAGTGTCTTCCAGAAATAGACTTATGAGCCAGTATCTCTAGAGCTTTA 1320
 DB 1380 GAATTAATGAGTGTCTTCCAGAAATAGACTTATGAGCCAGTATCTCTAGAGCTTTA 1439
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 DB 1440 ATATGTAAAGTGAAGAGTTCACCTCAAAATCAATAGAGATATATGGAAGCAAAATA 1499
 QY 1381 TTTGGGAAACCTATCGGAAGAAAGCAAGGCTCCCAACTTAAGCCATGATACGAAAT 1440
 DB 1500 TTTGGGAAACCTATCGGAAGAAAGCAAGGCTCCCAACTTAAGCCATGATACGAAAT 1559
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 DB 1560 CTAATTTATAGAGATTTGTTACTGAGCAACAGATTAATTAAGAGCTCCCTCACAAT 1619
 QY 1501 AAATTAAGCGTAAAGAGACCTTACATCAGGCGCTTCATCTGAGATTTTATCAAGAAA 1560
 DB 1620 AAATTAAGCGTAAAGAGACCTTACATCAGGCGCTTCATCTGAGATTTTATCAAGAAA 1679
 QY 1561 GCAGATTGGCAGTTCAAAAGACTCTCTGAATGATTAATCAGGAGACTAACAAGGAG 1620

1680 GCAGATTTGGCAGTTCAAAAGACCTCGTAATGATTAATGAGGAGACTAACCAAGCGAG 1739
1621 CAGATGCTCAAGTGAATATTTACTATATGCTGCTAGGAATAAAAAGGCTAT 1680
1740 CAGATGCTCAAGTGAATATTTACTATATGCTGCTAGGAATAAAAAGGCTAT 1739
1681 TCTATTCAGATGAGAAAAATCTACCCATAGATACGAAAAAGATCGCTTC 1740
1800 TCTATTCAGATGAGAAAAATCTACCCATAGATACGAAAAAGATCGCTTC 1859
1741 AAAAGAAAGCTGAGACCTATTAAGCAGCATTAAGCATATGAACTGAATTAATATC 1800
1860 AAAAGAAAGCTGAGACCTATTAAGCAGCATTAAGCATATGAACTGAATTAATATC 1919
1801 CACATTTCAAAAGCCTAAAAAGATAGGCTGAGGAGAAAGTCTTCCAGGCATAT 1860
1920 CACATTTCAAAAGCCTAAAAAGATAGGCTGAGGAGAAAGTCTTCCAGGCATAT 1979
1861 CATGCGCTTGAAGTATGATGAGTAAATCTAAGCCACCTAATTTGATGATTTGCA 1920
1980 CATGCGCTTGAAGTATGATGAGTAAATCTAAGCCACCTAATTTGATGATTTGCA 2039
1921 ATGATAGTGTCTAGCAGTGAAGAGATTAAGAAAAAGTACAAACCAATGCCAGTC 1980
2040 ATGATAGTGTCTAGCAGTGAAGAGATTAAGAAAAAGTACAAACCAATGCCAGTC 2039
1981 AGGCACAGCAGAAACCTTAACATCATGAGAGTAAAGACCTGCACTGAGCCAGAG 2040
2100 AGGCACAGCAGAAACCTTAACATCATGAGAGTAAAGACCTGCACTGAGCCAGAG 2159
2041 AGTAAACAAGCCAAATGAACACAGCAAGTAAAGACATGACAGTACTTCCAGAGTG 2100
2160 AGTAAACAAGCCAAATGAACACAGCAAGTAAAGACATGACAGTACTTCCAGAGTG 2219
2101 AAGTTAACAAATGACACCTGCTTTCTTACTAAGTGTTCAAATACAGAGTAAAGAA 2160
2220 AAGTTAACAAATGACACCTGCTTTCTTACTAAGTGTTCAAATACAGAGTAAAGAA 2279
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2280 TTGTGCAATCTTACCTTCCAAAGAGAAAAAGAAAGAACTAGAAACAGTTAAAGTG 2339
2221 TCTAATATGCTGAGAGACCCCAAGATCTCATTTAAGTGAAGAGGTTTCCAACT 2280
2340 TCTAATATGCTGAGAGACCCCAAGATCTCATTTAAGTGAAGAGGTTTCCAACT 2339
2281 GAAAGATCTGTAGAGAGTACAGTATTTCAATTTGCTGACTGATGATTAAGCAGT 2340
2400 GAAAGATCTGTAGAGAGTACAGTATTTCAATTTGCTGACTGATGATTAAGCAGT 2459
2341 GAAAGTATCTGTACTGAGAGTGAACATCTAGGAGAGGCAAAACAGAACTAA 2400
2460 GAAAGTATCTGTACTGAGAGTGAACATCTAGGAGAGGCAAAACAGAACTAA 2519
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2520 TGTGTGAGTCAAGTGTGACATTTGAAAAACCCCAAGGACTAATTCATGTTTCCAA 2579
2580 GATATATGAAATGACACAGAAAGGCTTAAGTATTCATTTGGACATGAAGTTAACAC 2639
2521 CGGGAACCAAGCATTAAGAAAGGAAAGTAACTGTATGCTGATTTGCAATTA 2580
2640 CGGGAACCAAGCATTAAGAAAGGAAAGTAACTGTATGCTGATTTGCAATTA 2699
2581 TTCAAGGTTTCAAGCCAGTCAATTTGCTGTTTCAATTCAGGAAATGAGAGAG 2640
2700 TTCAAGGTTTCAAGCCAGTCAATTTGCTGTTTCAATTCAGGAAATGAGAGAG 2759
2641 GAATGTGCACATTTCTGCCCACCTGTGGTCTTAAAGAAACAAGTCCAAAGTCACT 2700

2760 GAATGTGCACATTTCTGCCACCTGTGGTCTTAAAGAAACAAGTCCAAAGTCACT 2819
2701 TTGATATGAAACAAAGAAAGAAATTAAGAAAGATGAGTCTAATATCAAGCTCTA 2760
2820 TTGATATGAAACAAAGAAAGAAATTAAGAAAGATGAGTCTAATATCAAGCTCTA 2879
2761 CAGAGTATATATCACTGACAGGCTTCTGCTGGTGTGCAAGAAAGATTAAGCAGTT 2820
2880 CAGAGTATATATCACTGACAGGCTTCTGCTGGTGTGCAAGAAAGATTAAGCAGTT 2939
2821 AATGCAAAATGATATCAAGAGAGGCTAGGTTTGTCTATCATCTCACTTCAGAGGC 2880
2940 AATGCAAAATGATATCAAGAGAGGCTAGGTTTGTCTATCATCTCACTTCAGAGGC 2999
2881 AAGCAACTGACATCTTACTTCCAAATTAACATGACCTTTTACAAACCCATTCGTATA 2940
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2941 CCACCACTTTTCCATCAAGTCAATTTGTTAAACTAATGTAAGAAAAATCTGCTAGAG 3000
3060 CCACCACTTTTCCATCAAGTCAATTTGTTAAACTAATGTAAGAAAAATCTGCTAGAG 3119
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3120 GAAACCTTGAAGAACATTCATGTCACCTGAAGAGAAATGGGAAATGAGAACATTTCA 3179
3061 AGTACAGTGACACAAATTAGCCGTATATACATTAAGAAATGTTTAAAGAGCCAGC 3120
3180 AGTACAGTGACACAAATTAGCCGTATATACATTAAGAAATGTTTAAAGAGCCAGC 3239
3121 TCAAGCAATTAATTAAGAGTGTGCTCCAGTACTAATGAAGTGGGCTCCAGTATTAATA 3180
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3181 ATAGGTTCCAGTATGAAGAACATTCAGACAGACACTAGTAGAAACAGAGGCCAAAT 3240
3300 ATAGGTTCCAGTATGAAGAACATTCAGACAGACACTAGTAGAAACAGAGGCCAAAT 3359
3241 AATGCTATGCTTAATTAAGAGGTTTGTGCAACCTGAGCTTAAACAAAGTCTCTGGA 3300
3360 AATGCTATGCTTAATTAAGAGGTTTGTGCAACCTGAGCTTAAACAAAGTCTCTGGA 3419
3301 AGTAAATGTAAGCAATTCGAAATTAAGAAAGCAAGATTAAGAAAGTGTGCTGACAGT 3360
3420 AGTAAATGTAAGCAATTCGAAATTAAGAAAGCAAGATTAAGAAAGTGTGCTGACAGT 3479
3361 AATACAGATTTCTCTCATATCTGATTTACATTAAGTAAACAGCCCTATGGAAGTAT 3420
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3421 CATGATCTCAGGTTTGTGCTGAGACACCTGATGACCTGTTAGATGATGTAATTAAG 3480
3540 CATGATCTCAGGTTTGTGCTGAGACACCTGATGACCTGTTAGATGATGTAATTAAG 3599
3481 GAATATCTAGTTTGTGCAAAATGACATTAAGAAAGTGTGCTGTTTAAAGCAAAAGC 3540
3600 GAATATCTAGTTTGTGCAAAATGACATTAAGAAAGTGTGCTGTTTAAAGCAAAAGC 3659
3541 GTCCAGAAAGAGAGCTTAGCAGAGTCTAGCCCTTACCCATACCATTTGGCTCAG 3600
3660 GTCCAGAAAGAGAGCTTAGCAGAGTCTAGCCCTTACCCATACCATTTGGCTCAG 3719
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3601 GTTACCGAAAGAGGAGGCTTAAGAAATTAAGAGTCTAGAGGAGAT 3660
3661 GAAGAGCTTCCCTCTTCCAAACATTTGATTTGTAAGTAAGTAATTAATCTCTCAG 3720
3780 GAAGAGCTTCCCTCTTCCAAACATTTGATTTGTAAGTAAGTAATTAATCTCTCAG 3839
3721 TCTACTAGGCATACACCGTTGTACGAGTGTCTCTAAGAACACAGAGAGAAATTTA 3780
3840 TCTACTAGGCATACACCGTTGTACGAGTGTCTCTAAGAACACAGAGAGAAATTTA 3899

OY	3781	TTATCATGGAAGAAATAGCTTAAATGACGACGTAAACGAGTAATATGGCAAGGACATCT	384.0
Db	3900	TTATCATGGAAGAAATAGCTTAAATGACGACGTAAACGAGTAATATGGCAAGGACATCT	395.9
OY	3841	CAGGAACATCAACCTTAGTAGAGAAACAAATGTTCTGCTAGCTGTTTCTTCAACAGTGC	390.0
Db	3960	CAGGAACATCAACCTTAGTAGAGAAACAAATGTTCTGCTAGCTGTTTCTTCAACAGTGC	401.9
OY	3901	AGTGAATGGAAGACTTACTGTCGAATTCAAACCCGAGATACCTTCTTGATGATGGTCT	396.0
Db	4020	AGTGAATGGAAGACTTACTGTCGAATTCAAACCCGAGATACCTTCTTGATGATGGTCT	407.9
OY	3961	TCCAAACAAATGAGGCATCAGTCTGTAAGCCAGGAGTTGGTCTGAGTACAAAGAAATTG	402.0
Db	4080	TCCAAACAAATGAGGCATCAGTCTGTAAGCCAGGAGTTGGTCTGAGTACAAAGAAATTG	413.9
OY	4021	GTTTCAGATGATGAAAGAAAGAAACGGGGCTTGGAAAGAAATATCAAGAAAGACAAAGC	408.0
Db	4140	GTTTCAGATGATGAAAGAAAGAAACGGGGCTTGGAAAGAAATATCAAGAAAGACAAAGC	419.9
OY	4081	ATGATATTAACCTTAGTGAAGACGACATCTGGGTGTGAGTGTGAACAAAGCGTCTGAA	414.0
Db	4200	ATGATATTAACCTTAGTGAAGACGACATCTGGGTGTGAGTGTGAACAAAGCGTCTGAA	425.9
OY	4141	GACTGCTCAGGGCTATCTCTTCAGAGTGACATTTTAAACCTCAGCAGAGGGATACCATG	420.0
Db	4260	GACTGCTCAGGGCTATCTCTTCAGAGTGACATTTTAAACCTCAGCAGAGGGATACCATG	431.9
OY	4201	CAACATTAACGTGATTAAGCTCAGAGGAAGTAATGGCTGAACATGAAGAGCTGTGTAACAG	426.0
Db	4320	CAACATTAACGTGATTAAGCTCAGAGGAAGTAATGGCTGAACATGAAGAGCTGTGTAACAG	437.9
OY	4261	CATGGGAGCCAGCCTTCTACAGCTACCCCTTCATCATTAAGTGACTCTTCCGCTTGAG	432.0
Db	4380	CATGGGAGCCAGCCTTCTACAGCTACCCCTTCATCATTAAGTGACTCTTCCGCTTGAG	443.9
OY	4321	GACCTGGGAATTCGAAACAAAGCAATCAACAAAAGAGATTAACCTCACAACAAAGT	438.0
Db	4440	GACCTGGGAATTCGAAACAAAGCAATCAACAAAAGAGATTAACCTCACAACAAAGT	449.9
OY	4381	AGTGAATACCTTAAGCCAGACATTCAGAAAGCCCTTCTGCTGACAAGTTTGAGAGTCT	444.0
Db	4500	AGTGAATACCTTAAGCCAGACATTCAGAAAGCCCTTCTGCTGACAAGTTTGAGAGTCT	455.9
OY	4441	GCAGATAGTTTCTACCACTAAAAATTAAGAACCCAGAGTGGAAAGCTATCCCTCTTAAA	450.0
Db	4560	GCAGATAGTTTCTACCACTAAAAATTAAGAACCCAGAGTGGAAAGCTATCCCTCTTAAA	461.9
OY	4501	TGCCCATGATTAGATGATAGTGTGTACATGCACAGTTGCTGTGGAGCTTCAACATAGA	456.0
Db	4620	TGCCCATGATTAGATGATAGTGTGTACATGCACAGTTGCTGTGGAGCTTCAACATAGA	467.9
OY	4561	AACTAACCATCTCAAGAGAGCTCATTAAGTTGTGTGATGTGAGAGCAACAGCTGAA	462.0
Db	4680	AACTAACCATCTCAAGAGAGCTCATTAAGTTGTGTGATGTGAGAGCAACAGCTGAA	473.9
OY	4621	GAGTCTGGGGCAACAGATTTAGCGGAAACATCTTAACCTTGCCCAAGCAAGATCTAGAGGA	468.0
Db	4740	GAGTCTGGGGCAACAGATTTAGCGGAAACATCTTAACCTTGCCCAAGCAAGATCTAGAGGA	479.9
OY	4681	ACCCCTTAACCTGGAATCTGGAATAGAGCTCTTCTGTGATGACCCCTGATCGATCTTCT	474.0
Db	4800	ACCCCTTAACCTGGAATCTGGAATAGAGCTCTTCTGTGATGACCCCTGATCGATCTTCT	485.9
OY	4741	GAAAGACAGAGCCCAAGAGTCAAGTCTGTGTGTCGCAACATACCATCTTCAACCTGCAATG	480.0
Db	4860	GAAAGACAGAGCCCAAGAGTCAAGTCTGTGTGTCGCAACATACCATCTTCAACCTGCAATG	491.9
OY	4801	AAAGTTCCCCAATGAAATGTGCAAGATCTGCCAGAGTCCAGAGTCCAGTGTGCTCATATCACT	486.0
Db	4920	AAAGTTCCCCAATGAAATGTGCAAGATCTGCCAGAGTCCAGAGTCCAGTGTGCTCATATCACT	497.9

QY	4861	GATATCGTGGGTATTAATGCAATGGAAAGAAAGTGGACAGGAGAAACCGAATTTGCA	4920
Db	4960	GATACGTCTGGGTATATATGCAATGCAAGAAAGTGTGACGAGGAGAAACCGAATTTGCA	5039
QY	4921	GCTTCACAGAAAGGGTCACAAAAAGAAATGTCATGATGTCGTGTGGCCGTACCCAGAA	4980
Db	5040	GCTTCACAGAAAGGGTCACAAAAAGAAATGTCATGATGTCGTGTGGCCGTACCCAGAA	5099
QY	4961	GAATTATATGCTCGTGTACAAAGTTTGGCCAGAAAACACCAATCACTTTAACTAATCTAAT	5040
Db	5100	GAATTATATGCTCGTGTACAAAGTTTGGCCAGAAAACACCAATCACTTTAACTAATCTAAT	5159
QY	5041	ACTGAAGAGACTACATCATGTGTGTAATGAAACAGATGCTGAGTTTGTGTGGAACGACA	5100
Db	5160	ACTGAAGAGACTACATCATGTGTGTAATGAAACAGATGCTGAGTTTGTGTGGAACGACA	5219
QY	5101	CTGAATAATTTTCTAGAAATTCGCGGAGGAAAGATGGGTAGTTAGCTAATTTCTGGGTACC	5160
Db	5220	CTGAATAATTTTCTAGAAATTCGCGGAGGAAAGATGGGTAGTTAGCTAATTTCTGGGTACC	5279
QY	5161	CAGTCATATTTAAAGAAAGAAATATGCTGAAATGACATGATTTTGAAGTCAGAGGAGATGTG	5220
Db	5280	CAGTCATATTTAAAGAAAGAAATATGCTGAAATGACATGATTTTGAAGTCAGAGGAGATGTG	5339
QY	5221	GTCATATGGAAGAAACACCAAGGTCACAAAGGAGACAAGAAATCCACAGACAGAAAGATC	5280
Db	5340	GTCATATGGAAGAAACACCAAGGTCACAAAGGAGACAAGAAATCCACAGACAGAAAGATC	5399
QY	5281	TTTCAGGGGGCTAGAAATCTGTTGGTATGAGGCCCTTCACCAACATGCCACAGATCAACTG	5340
Db	5400	TTTCAGGGGGCTAGAAATCTGTTGGTATGAGGCCCTTCACCAACATGCCACAGATCAACTG	5459
QY	5341	GAATGATGATGATACAGCTGTGTGGTCTTCTGTGGTGAAGGAGCTTTATCATTTACCCCTT	5400
Db	5460	GAATGATGATGATACAGCTGTGTGGTCTTCTGTGGTGAAGGAGCTTTATCATTTACCCCTT	5519
QY	5401	GGCAGAGGTGTCACACCCCAATTTGSGTTGTGAGCCAGATGTCCTGGACAGAGACAATGGC	5460
Db	5520	GGCAGAGGTGTCACACCCCAATTTGSGTTGTGAGCCAGATGTCCTGGACAGAGACAATGGC	5579
QY	5461	TTTCATGCAATTTGGGACAGATGTGTGAGGCACCTGTGTGACCCGAGATGGGTGTTGGAC	5520
Db	5580	TTTCATGCAATTTGGGACAGATGTGTGAGGCACCTGTGTGACCCGAGATGGGTGTTGGAC	5639
QY	5521	AGTGTAGACACTCTACCAAGTGGCAGAGCTGGACACCTAATCTGATATACCCAGATCCCCAC	5580
Db	5640	AGTGTAGACACTCTACCAAGTGGCAGAGCTGGACACCTAATCTGATATACCCAGATCCCCAC	5699
QY	5581	AGCCACTTAC 5589	
Db	5700	AGCCACTTAC 5708	

RESULT 10-553-1
US-08-483-553-1
Sequence 1, Application US/08483553
Patent No. 5709999
GENERAL INFORMATION:
APPLICANT: Skolnick, Mark H.
APPLICANT: Goldgar, David E.
APPLICANT: Miki, Yoshio
APPLICANT: Swenson, Jeff
APPLICANT: Kamb, Alexander
APPLICANT: Harshman, Keith D.
APPLICANT: Shattuck-Elidens, Donna M.
APPLICANT: Tavtiglian, Sean V.
APPLICANT: Wiseman, Roger W.
APPLICANT: Futreal, P. Andrew
TITLE OF INVENTION: 1q-Linked Breast and Ovarian Cancer
Susceptibility Gene
NUMBER OF SEQUENCES: 85
CORRESPONDENCE ADDRESSES:
ADDRESSEE: Venable, Baetjer, Howard & Civiletti, LLP

```

STREET: 1201 New York Avenue, N.W., Suite 1000
CITY: Washington
STATE: DC
COUNTRY: USA
ZIP: 20005
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/483,553
FILING DATE:
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/409,305
FILING DATE: 24-MAR-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/348,824
FILING DATE: 29-NOV-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/308,104
FILING DATE: 16-SEP-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/300,266
FILING DATE: 02-SEP-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/289,221
FILING DATE: 12-AUG-1994
ATTORNEY/AGENT INFORMATION:
NAME: Ihnen, Jeffrey L.
REGISTRATION NUMBER: 28,957
REFERENCE/DOCKET NUMBER: 24884-109347
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-962-4810
TELEFAX: 202-962-8300
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 5914 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: cDNA
HYPOTHETICAL: NO
ANTI-SENSE: NO
ORIGINAL SOURCE:
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: CDS
LOCATION: 120..5711
US-08-483-553-1

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Query Match 99.9%; Score 5585.8; DB 1; Length 5914;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 5587; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 ATGGATTATCTGCTGCTGCGTTGAGAGAGTACAAAATGCAATTAATGCTATGCAAAA 60
Db 120 ATGGATTATCTGCTGCTGCGTTGAGAGAGTACAAAATGCAATTAATGCTATGCAAAA 179
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Db 180 ATCTAGAGTGTCCCATCTGCTGAGAGTATGATCAAGAACCTGTCTCCACAAAGTGTAC 239
QY 121 CACATATTTTGCAGATTTTGCATGCTGAGAACTTCTCAACCAAGAAAGGCGCTTCAAG 180
Db 240 CACATATTTTGCAGATTTTGCATGCTGAGAACTTCTCAACCAAGAAAGGCGCTTCAAG 299
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Db 300 TGTCTTATGTAGATGATATACCAAGAGCGCTACAGAAAGTATGAGAGTTAGT 359
QY 241 CAACCTGTTGAAGAGCTATTGAAGAAATCATTTGTCTTTCAGCTTGACACAGTTTGAG 300

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Db 360 CAACCTGTTGAAGAGCTATTGAAGAAATCATTTGTCTTTCAGCTTGACACAGTTTGAG 419
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Db 420 TATGCAAAACAGCTTAATTTTGCAGAAAGAAATTAATCTCTGAAATCTTAAGAT 479
QY 361 GAAGTTCTATCATCAAGATATGGGCTACAGAAACCGTGCAAAAGACTCTACAGAT 420
Db 480 GAAGTTCTATCATCAAGATATGGGCTACAGAAACCGTGCAAAAGACTCTCTACAGAT 539
QY 421 GAACCCGAAATCCCTCCCTGCGAGAAACAGTCTAGTGTCAACTCTCTTAACCTTGA 480
Db 540 GAACCCGAAATCCCTCCCTGCGAGAAACAGTGTCAAGTGTCAACTCTCTTAACCTTGA 599
QY 481 ACTGTAGAACTCTGAGAGACAAAGCGGATATACACTCAAAAGAGCTGTCTACATT 540
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QY 541 GAATTGGATCTGATTTCTGTGAGATATACCGTTAATAAGCACTTAATTGAGTGGGA 600
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Db 720 GATCAGAAATTTGTACAAATCACCCCTCAAGGAACAGGATGAATCATGTTGGATTCT 779
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Db 900 TATCAGGATGTTCTGTTTCAAACTGATGTGAGGATGTGACAAATPACTGATGCC 959
QY 841 AGCTCATTTACGATGAGAACAGAGATTTATCTACTTAAGACAGAAATAGTGA 900
Db 960 AGCTCATTTACGATGAGAACAGAGATTTATCTACTTAAGACAGAAATAGTGA 1019
QY 901 AAGGCTGAATCTGATTAATTAAGCAAGCGCTGATAGCAAGAGCAATATACGA 960
Db 1020 AAGGCTGAATCTGATTAATTAAGCAAGCGCTGATAGCAAGAGCAATATACGA 1079
QY 961 TGGGCTGGAAGTAAGAAACATGTATGATAGCGGAGCTCCACACAGAAAAAGGTA 1020
Db 1080 TGGGCTGGAAGTAAGAAACATGTATGATAGCGGAGCTCCACACAGAAAAAGGTA 1139
QY 1021 GATCTGAATGCTATCCCTGTGTGAGAGAAAGATGATTAAGCAAGAACTGCCATGC 1080
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Db 1200 TCAGAGATCCTAGATATGAGATGATGATGTTCCCTGATTAACATCAATATAGCAGATT 1259
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QY 1261 GAATATCTGTTCTTACAGAAATATGACTTATGSCAGTGTCTCTAGAGGCTTTA 1320
Db 1380 GAATATCTGTTCTTACAGAAATATGACTTATGSCAGTGTCTCTAGAGGCTTTA 1439
QY 1321 ATATGTAAAGTGAAGAGTTCACCTCAATATGATAGAGTATATTTGAAGACAAATA 1380

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Db 1440 ATATGTAAAGTGAAGAGTTCACATCCAAATCAGTAGAGATTAATTGGAACAAAAATA 1499
QY 1381 TTGGGAAAACCTATCGAGAGAGGCAAGCCCTCCCAACTTAAGCATCTAAGTAAAT 1440
Db 1500 TTGGGAAAACCTATCGAGAGAGGCAAGCCCTCCCAACTTAAGCATCTAAGTAAAT 1559
QY 1441 CTAATTTATAGAGCATTTTGTACTGAGCCACAGATTAATCAAGAGCGTCCCTCACAAT 1500
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Db 1520 AAATTAAGGCTAAAGAGAGACCTCATCAGGCTTCATCCAGGATTTTTCAGAAA 1679
QY 1561 GCAGATTTGGAGATTCAAAAGAGCTCTGAATATGATTAATCAAGGAACTAACCAAGCGAG 1620
Db 1680 GCAGATTTGGAGATTCAAAAGAGCTCTGAATATGATTAATCAAGGAACTAACCAAGCGAG 1739
QY 1621 CAGAAATGTCAGATGATTAATTTACTAATAGTGTCTATGAGATTAATCAAAAGGTGAT 1680
Db 1740 CAGAAATGTCAGATGATTAATTTACTAATAGTGTCTATGAGATTAATCAAAAGGTGAT 1799
QY 1681 TCTATTCAGAAATGAGAAAATCCTAACCCAAATAGATCATCTGAAAAAGAAATCTGTTTC 1740
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QY 1741 AAAAGCAAGAGCTGAACCTATTAAGAGCAGATATTAAGCAATATGGAATCTGAATTAATATC 1800
Db 1860 AAAAGCAAGAGCTGAACCTATTAAGAGCAGATATTAAGCAATATGGAATCTGAATTAATATC 1919
QY 1801 CACAAATTCAAAAGCCTTAATAAGATATAGCTGAGAGAGAGAGTCTTTCACAGCATATT 1860
Db 1920 CACAAATTCAAAAGCCTTAATAAGATATAGCTGAGAGAGAGAGTCTTTCACAGCATATT 1979
QY 1861 CATCGGCTTGAAGTATAGTATGATGAATATCAAGCCCACTAATTTGATAGTAAATGCA 1920
Db 1980 CATCGGCTTGAAGTATAGTATGATGAATATCAAGCCCACTAATTTGATAGTAAATGCA 2039
QY 1921 ATTGATAGTGTCTAGCAGTGAAGAGATTAAGAAAAAGTACACCAATATGCGAGTC 1980
Db 2040 ATTGATAGTGTCTAGCAGTGAAGAGATTAAGAAAAAGTACACCAATATGCGAGTC 2099
QY 1981 AGGACAGCAGCAAAACCTTAACAATCATGGAAGTAAAGAACTGCAACTGAGGCCAAGAG 2040
Db 2100 AGGACAGCAGCAAAACCTTAACAATCATGGAAGTAAAGAACTGCAACTGAGGCCAAGAG 2159
QY 2041 AGTAACAAGCCAAATGAACAGACAAATGAAGACATGACAGTACTTTCCCAAGCTG 2100
Db 2160 AGTAACAAGCCAAATGAACAGACAAATGAAGACATGACAGTACTTTCCCAAGCTG 2219
QY 2101 AAGTTAACAAATGCACTGTGTTCTTTACTAAGTGTCAAAATACCAAGTGAACCTTAAGAA 2160
Db 2220 AAGTTAACAAATGCACTGTGTTCTTTACTAAGTGTCAAAATACCAAGTGAACCTTAAGAA 2279
QY 2161 TTGTGCAATCCTAGCCTTCCAAAGAGAAAGAAAAAGAACTGAAAAAGCTTAAGAGTG 2220
Db 2280 TTGTGCAATCCTAGCCTTCCAAAGAGAAAGAAAAAGAACTGAAAAAGCTTAAGAGTG 2339
QY 2221 TCTATTAATGCTGAAGAGCCCAAGATCTCATGTTAACTGGAAGAGGTTTTCGAAACT 2280
Db 2340 TCTATTAATGCTGAAGAGCCCAAGATCTCATGTTAACTGGAAGAGGTTTTCGAAACT 2399
QY 2281 GAAAGATCTGTAGAGAGTGAAGTATTTTCATTTGCTAGCTGTACTGATTAATGCACTGAG 2340
Db 2400 GAAAGATCTGTAGAGAGTGAAGTATTTTCATTTGCTAGCTGTACTGATTAATGCACTGAG 2459
QY 2341 GAAAGTATCTGCTAGCTAGAGAGTGAAGTATTTTCATTTGCTAGCTGTACTGATTAATGCA 2400
Db 2460 GAAAGTATCTGCTAGCTAGAGAGTGAAGTATTTTCATTTGCTAGCTGTACTGATTAATGCA 2519
QY 2401 TGTGTAGTCAAGTGTGAGCATTTTGAAGAAAGGAGACTAATTCATGTTGTTGCAAA 2460
Db 2520 TGTGTAGTCAAGTGTGAGCATTTTGAAGAAAGGAGACTAATTCATGTTGTTGCAAA 2579

QY 2461 GATTAATAGAAATGACACAGAAAGGCTTTAAGTATCCATTTGGACATGAAGTTAACACAGT 2520
Db 2580 GATTAATAGAAATGACACAGAAAGGCTTTAAGTATCCATTTGGACATGAAGTTAACACAGT 2639
QY 2521 CGGGAACACAGCATGAAATGGAAGAGAAAGTGAATGCTGCTAGTATTTTCAGAAATCA 2580
Db 2640 CGGGAACACAGCATGAAATGGAAGAGAAAGTGAATGCTGCTAGTATTTTCAGAAATCA 2699
QY 2581 TTCAAGGTTTCAAAAGCGCAGTCAATTTCTGTTTCAATCCAGGAAATGCAAGAGAG 2640
Db 2700 TTCAAGGTTTCAAAAGCGCAGTCAATTTCTGTTTCAATCCAGGAAATGCAAGAGAG 2759
QY 2641 GAATGTGCAACATTTCTGCCACTCTGGGTCTTTAAAGAAACAAAGTCCAAAAGTCACT 2700
Db 2760 GAATGTGCAACATTTCTGCCACTCTGGGTCTTTAAAGAAACAAAGTCCAAAAGTCACT 2819
QY 2701 TTTGAATGTGAACAAAAGAAAGAAATTAAGAAAGAAAGTGTCTAATATCAAGCCGTGA 2760
Db 2820 TTTGAATGTGAACAAAAGAAAGAAATTAAGAAAGAAAGTGTCTAATATCAAGCCGTGA 2879
QY 2761 CAGACAGTTAATATCAGTGCAGAGGCTTTCCTGGTGTGTCAGAAAGATTAAGCCAGTTGAT 2820
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QY 2821 AATGCCAAATGATATCAAAAGAGGCTCTAGGTTTGTCTATCATCTCAGTTTCAGAGGC 2880
Db 2940 AATGCCAAATGATATCAAAAGAGGCTCTAGGTTTGTCTATCATCTCAGTTTCAGAGGC 2999
QY 2881 AAGCAAACTGCACTATTTACCTCAAAATTAACATGACCTTTTCAAAAACCCATATGCTATA 2940
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QY 2941 CCACCACTTTTCCCATCAAGTCAATTTTGTAAATCAATATAGAAAAATCTGCTAGAG 3000
Db 3060 CCACCACTTTTCCCATCAAGTCAATTTTGTAAATCAATATAGAAAAATCTGCTAGAG 3119
QY 3001 GAAAACCTTTGAGGAACATTCATGTCACCTGAAAAGAGAAATGGAATAATGAAACATTCGA 3060
Db 3120 GAAAACCTTTGAGGAACATTCATGTCACCTGAAAAGAGAAATGGAATAATGAAACATTCGA 3179
QY 3061 AGTACAGTACAGACATTTAGCCGTAAATTAACATTTAGAAAAATGTTTAAAGAAAGCCAGC 3120
Db 3180 AGTACAGTACAGACATTTAGCCGTAAATTAACATTTAGAAAAATGTTTAAAGAAAGCCAGC 3239
QY 3121 TCAAGCAATTAATTAAGAGTGTGCTCAGTACTAATGAAGTGGGCTCCAGTATTAATGA 3180
Db 3240 TCAAGCAATTAATTAAGAGTGTGCTCAGTACTAATGAAGTGGGCTCCAGTATTAATGA 3299
QY 3181 ATAGGTTCCAGTATGAAGAAACATTCACAGCAGACTAGTAGAAGAGGCCCCAAATTTG 3240
Db 3300 ATAGGTTCCAGTATGAAGAAACATTCACAGCAGACTAGTAGAAGAGGCCCCAAATTTG 3359
QY 3241 AATGCTATGCTTAAGTATGGGGTTTTCGAACCTGAGGCTTAATGAAGAAAGTCTTCCGGA 3300
Db 3360 AATGCTATGCTTAAGTATGGGGTTTTCGAACCTGAGGCTTAATGAAGAAAGTCTTCCGGA 3419
QY 3301 AGTAAATTTAAGCAATCCGTAATTAAGAAAGCAAAATATGAAGTGAAGTTCAGACTGT 3360
Db 3420 AGTAAATTTAAGCAATCCGTAATTAAGAAAGCAAAATATGAAGTGAAGTTCAGACTGT 3479
QY 3361 AATACAGATTTTCTCCATATCTGATATTTAGATTAATGAAACGCTATGGAAGTATG 3420
Db 3480 AATACAGATTTTCTCCATATCTGATATTTAGATTAATGAAACGCTATGGAAGTATG 3539
QY 3421 CATGATCTCAGGTTTGTGTCAGACACCTGATACCTGTTAGATGATGTAAGTAAAG 3480
Db 3540 CATGATCTCAGGTTTGTGTCAGACACCTGATACCTGTTAGATGATGTAAGTAAAG 3599
QY 3481 GAAGTACTAGTTTGTGTAAGAAATGACATTAAGGAAGTCTGCTGTTTTCAGCAAAAGC 3540
Db 3600 GAAGTACTAGTTTGTGTAAGAAATGACATTAAGGAAGTCTGCTGTTTTCAGCAAAAGC 3659

OY	3541	TTCCAGAAAGGAGAGCTTAGAGAGAGTCCTGACCCCTTCACCCATPACATTTGGCTAG	3600
Db	3660	GTCCAGAAAGGAGAGCTTAGAGAGAGTCCTGACCCCTTCACCCATPACATTTGGCTAG	3719
OY	3601	GGTTACCGAAGAGGGGCCAAGAAATTAAGAGTCCTCAGAAAGAACTTATCTAGTAGAGAT	3660
Db	3720	GGTTACCGAAGAGGGGCCAAGAAATTAAGAGTCCTCAGAAAGAACTTATCTAGTAGAGAT	3779
OY	3661	GAAGAGCTTCCCTGCTTCCAACTCTGTATTTGGTAAAGTAAACAAATATACCTTCTCAG	3720
Db	3780	GAAGAGCTTCCCTGCTTCCAACTCTGTATTTGGTAAAGTAAACAAATATACCTTCTCAG	3839
OY	3721	TCTACTAGGCACTAGCACCGCTTGCTACCGAGTGTCTGTAAAGACACAGAGAGATTTA	3780
Db	3840	TCTACTAGGCACTAGCACCGCTTGCTACCGAGTGTCTGTAAAGACACAGAGAGATTTA	3899
OY	3781	TTATCATTTGAGAAATAGCTTAAATGAGTCGAGTAAACCGAGTAAATATTGGCAAGGCACT	3840
Db	3900	TTATCATTTGAGAAATAGCTTAAATGAGTCGAGTAAACCGAGTAAATATTGGCAAGGCACT	3958
OY	3841	CAGGAACATCACCTTAGTAGAGAAACAAATGTTCTGTAGCTTGTATTCTTCAOAGTGC	3900
Db	3960	CAGGAACATCACCTTAGTAGAGAAACAAATGTTCTGTAGCTTGTATTCTTCAOAGTGC	4019
OY	3901	AGTGAATTTGGAAGACTTGACGCAAAATCAAAACCCAGATCCCTTCTTATTTGGTCT	3960
Db	4020	AGTGAATTTGGAAGACTTGACGCAAAATCAAAACCCAGATCCCTTCTTATTTGGTCT	4079
OY	3961	TTCCAAACAAATAGAGGCACTAGCTGAAAGCCAGAGAGTGTGCTGAGAGCAAGAAATTG	4020
Db	4080	TTCCAAACAAATAGAGGCACTAGCTGAAAGCCAGAGAGTGTGCTGAGAGCAAGAAATTG	4139
OY	4021	GTTCAGATGATGAGAAAGAGGAGACGGGCTTGGAGAAATTAATCAAGAGACCAAGC	4080
Db	4140	GTTCAGATGATGAGAAAGAGGAGACGGGCTTGGAGAAATTAATCAAGAGACCAAGC	4199
OY	4081	ATGGAATTCAAACTTAGGAGAAAGCAAGCANTCTGGGTGTAGAGTGAACAAGGCTCTGAA	4140
Db	4200	ATGGAATTCAAACTTAGGAGAAAGCAAGCANTCTGGGTGTAGAGTGAACAAGGCTCTGAA	4259
OY	4141	GACGCTCAGAGGCTATCCCTCTCAGAGTAGACATTTTAACCACTCAGAGAGGATATACATG	4200
Db	4260	GACGCTCAGAGGCTATCCCTCTCAGAGTAGACATTTTAACCACTCAGAGAGGATATACATG	4319
OY	4201	CAACATAACCTGATTAAGGCTCCAGCAGGAAATGGCTGAACATGAGAGCTGTGTGAACAG	4260
Db	4320	CAACATAACCTGATTAAGGCTCCAGCAGGAAATGGCTGAACATGAGAGCTGTGTGAACAG	4379
OY	4261	CATGGGAGCCAGCCTTTCTAACAGCTACCCCTTCATATAGTACTCTTCTGCCCTTGAG	4320
Db	4380	CATGGGAGCCAGCCTTTCTAACAGCTACCCCTTCATATAGTACTCTTCTGCCCTTGAG	4439
OY	4321	GACCTGCGAAATCCAGAAACAAGACATCAGAAAGACAGATTAACCTCAGCAAAAAGT	4380
Db	4440	GACCTGCGAAATCCAGAAACAAGACATCAGAAAGACAGATTAACCTCAGCAAAAAGT	4499
OY	4381	AGTGAATPCCCTATTAAGCCAGATTCAGAAAGCCTTCTGTGCAAGTTTGAAGTGTCT	4440
Db	4500	AGTGAATPCCCTATTAAGCCAGATTCAGAAAGCCTTCTGTGCAAGTTTGAAGTGTCT	4559
OY	4441	GCAATATGTTCTTACCAGTAAAAATTAAGAAACAGAGAGTGAAGGATATCCCTCTTCAA	4500
Db	4560	GCAATATGTTCTTACCAGTAAAAATTAAGAAACAGAGAGTGAAGGATATCCCTCTTCAA	4619
OY	4501	TGCCATCATTTAGATAGTGGTGTACTATGACAGATTTGCTGGAGAGCTTCACAATAAGA	4560
Db	4620	TGCCATCATTTAGATAGTGGTGTACTATGACAGATTTGCTGGAGAGCTTCACAATAAGA	4679
OY	4561	AACATACCATCTCAAGAGAGCTCATTTAAGGTTGTGATGTGAGAGCAACAGCTGGAA	4620
Db	4680	AACATACCATCTCAAGAGAGCTCATTTAAGGTTGTGATGTGAGAGCAACAGCTGGAA	4739
OY	4621	GAGTCTGGGCCACACGATTTGACGGAAAAACATCTTACTTGGCCAGGCAAGATCTAGAGGA	4680

Dd	4740	GAGTGTGGGCGACAGATTGACGGAAACATCTTACTTGCCAGGACAGATCTGAGGGA	4799
Qy	4681	ACCCCTTACCGAGATCTGGAATGACAGCCTCTTCTGATGACCCGATGATGATCTCT	4740
Dd	4800	ACCCTTACCGTGAATCTGGAAATCAGCCTCTTCTGATGACCCGATGATGATCTCT	4859
Qy	4741	GAAGACAGAGCCCCAGAGTCACTGCTGTGGCAACATACCATCTTCAACCTGCAATG	4800
Dd	4860	GAAGACAGAGCCCCAGAGTCACTGCTGTGGCAACATACCATCTTCAACCTGCAATG	4919
Qy	4801	AAAGTTCGCCAATTGAAAGTTGCGAATCTGCCCCAGAGTCCAGTGGTGGCTCATCTACT	4860
Dd	4920	AAAGTTCGCCAATTGAAAGTTGCGAATCTGCCCCAGAGTCCAGTGGTGGCTCATCTACT	4979
Qy	4861	GATACGTGCGGTATTAATCAATGAAGAAAGTGTGAGCAGAGGAGAAAGCCAGATTGACA	4920
Dd	4980	GATACGTGCGGTATTAATCAATGAAGAAAGTGTGAGCAGAGGAGAAAGCCAGATTGACA	5039
Qy	4921	GCTTCAACAGAAAGGGTCAACAAAAAAGATGTCATGGTGGTGTGCGCTGACCCAGAA	4980
Dd	5040	GCTTCAACAGAAAGGGTCAACAAAAAAGATGTCATGGTGGTGTGCGCTGACCCAGAA	5099
Qy	4981	GAATTATAGCGCGGTACAACTTGGCCAGAAACACACATCACTTTAACTAACTAAT	5040
Dd	5100	GAATTATAGCGCGGTACAACTTGGCCAGAAACACACATCACTTTAACTAACTAAT	5159
Qy	5041	ACTGAGAGAGACTACTCATGTTGTTATGAAAAACAGATCGTAGTTGTGTGGAAGGACA	5100
Dd	5160	ACTGAGAGAGACTACTCATGTTGTTATGAAAAACAGATCGTAGTTGTGTGGAAGGACA	5219
Qy	5101	CTGAATAATTTTCTAGCAATTCGGGGAGAAATGGTAGTTAGCTATTTCTGGGTGAC	5160
Dd	5220	CTGAATAATTTTCTAGCAATTCGGGGAGAAATGGTAGTTAGCTATTTCTGGGTGAC	5279
Qy	5161	CAGCTATTAAGAAAGAAATCTGTGAATGAGATGATTTTGAAGTCAGAGGAGATGTG	5220
Dd	5280	CAGCTATTAAGAAAGAAATCTGTGAATGAGATGATTTTGAAGTCAGAGGAGATGTG	5339
Qy	5221	GTCATATGAAAGAAACACACAGATGTCAAAAGGACAGAGAAATGCCAGAGACAGAAATC	5280
Dd	5340	GTCATATGAAAGAAACACACAGATGTCAAAAGGACAGAGAAATGCCAGAGACAGAAATC	5399
Qy	5281	TTACAGGGGGCTAGAAATCTGTGCTATGAGGCCCTTCACCAACATGGCCACAGATCACTG	5340
Dd	5400	TTACAGGGGGCTAGAAATCTGTGCTATGAGGCCCTTCACCAACATGGCCACAGATCACTG	5459
Qy	5341	GAATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT	5400
Dd	5460	GAATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT	5519
Qy	5401	GGCAGAGTGTCCACCAATGTTGTTGTGAGAGCAATGCTGAGACAGAGAGCAATGGC	5460
Dd	5520	GGCAGAGTGTCCACCAATGTTGTTGTGAGAGCAATGCTGAGACAGAGAGCAATGGC	5579
Qy	5461	TTCCATGCAATTGGGCGAGATGTGTGAGGACACTGTGTTGACCCGAGATGGGTGTTGAC	5520
Dd	5580	TTCCATGCAATTGGGCGAGATGTGTGAGGACACTGTGTTGACCCGAGATGGGTGTTGAC	5639
Qy	5521	AGTATGACACTTACCAAGTGTGAGAGGACCTGACACCTGATACCCGAGATGCCAC	5580
Dd	5640	AGTATGACACTTACCAAGTGTGAGAGGACCTGACACCTGATACCCGAGATGCCAC	5699
Qy	5581	AGCCACTAC 5589	
Dd	5700	AGCCACTAC 5708	

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? APPLICANT: Shattuck-Eldens, Donna M.
? APPLICANT: Simard, Jacques
? APPLICANT: Eml, Mitsuru
? APPLICANT: Nakamura, Yusuke
? APPLICANT: Durocher, Francine
? TITLE OF INVENTION: 17q-Linked Breast and Ovarian Cancer
? TITLE OF INVENTION: Susceptibility Gene
? NUMBER OF SEQUENCES: 85
? CORRESPONDENCE ADDRESS:
? ADDRESSEE: Venables, Baetjer, Howard & Civiletti, LLP
? STREET: 1201 New York Avenue, N.W., Suite 1000
? CITY: Washington
? STATE: DC
? COUNTRY: USA
? ZIP: 20005
? COMPUTER READABLE FORM:
? MEDIUM TYPE: Floppy disk
? COMPUTER: IBM PC compatible
? OPERATING SYSTEM: PC-DOS/MS-DOS
? SOFTWARE: PatentIn Release #1.0, Version #1.30
? CURRENT APPLICATION DATA:
? APPLICATION NUMBER: US/08/487,002
? FILING DATE:
? CLASSIFICATION: 424
? PRIOR APPLICATION DATA:
? APPLICATION NUMBER: US 08/409,305
? FILING DATE: 24-MAR-1995
? PRIOR APPLICATION DATA:
? APPLICATION NUMBER: US 08/348,824
? FILING DATE: 29-NOV-1994
? PRIOR APPLICATION DATA:
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? FILING DATE: 16-SEP-1994
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? APPLICATION NUMBER: US 08/300,266
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? APPLICATION DATA:
? APPLICATION NUMBER: US 08/289,221
? FILING DATE: 12-AUG-1994
? ATTORNEY/AGENT INFORMATION:
? NAME: Ihnen, Jeffrey L.
? REGISTRATION NUMBER: 28,957
? REFERENCE/DOCKET NUMBER: 24884-109347
? TELECOMMUNICATION INFORMATION:
? TELEPHONE: 202-962-4810
? TELEFAX: 202-962-8300
? INFORMATION FOR SEQ ID NO: 1:
? SEQUENCE CHARACTERISTICS:
? LENGTH: 5914 base pairs
? TYPE: nucleic acid
? STRANDEDNESS: double
? TOPOLOGY: linear
? MOLECULE TYPE: cDNA
? HYPOTHETICAL: NO
? ANTI-SENSE: NO
? ORIGINAL SOURCE:
? ORGANISM: Homo sapiens
? FEATURE:
? NAME/KEY: CDS
? LOCATION: 120..5711
? US-08-487-002-1

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Query Match 99.9%; Score 5585.8; DB 1; Length 5914;
 Best Local Similarity 100.0%; Pred. No. 0;
 Matches 5587; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

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QY 1 ATGGATTATCTCTCTCCGTTGAAGAGTACAAATGTCATTATGCTATGCAAAA 60
DB 120 ATGGATTATCTCTCTCCGTTGAAGAGTACAAATGTCATTATGCTATGCAAAA 179
QY 61 ATCTTAGAGTGTCCCATCTGTCTGAGATTGATCAAGAACCTGCTCCCAAAAGTGTAC 120
DB 180 ATCTTAGAGTGTCCCATCTGTCTGAGATTGATCAAGAACCTGCTCCCAAAAGTGTAC 239

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QY 121 CACATATTTTGCAAATTTTGCATGCTGAATCTTCAACCGAAGAAAGGCCCTTCACAG 180
DB 240 CACATATTTTGCAAATTTTGCATGCTGAATCTTCAACCGAAGAAAGGCCCTTCACAG 299
QY 181 TGTCTTTATGTAAGTAATGATATACCAAAAGAGCCCTACAGAAAGTACAGATTACT 240
DB 300 TGTCTTTATGTAAGTAATGATATACCAAAAGAGCCCTACAGAAAGTACAGATTACT 359
QY 241 CAATCTTGTGAAGCATTAATGAATATTTGCTTTTACGTTTACACAGATTGAG 300
DB 360 CAATCTTGTGAAGCATTAATGAATATTTGCTTTTACGTTTACACAGATTGAG 419
QY 301 TATGCAAAACAGCTATTAATTTTGCAAAAAGAAAAATTAATCTTCTGAACATCTAAAGAT 360
DB 420 TATGCAAAACAGCTATTAATTTTGCAAAAAGAAAAATTAATCTTCTGAACATCTAAAGAT 479
QY 361 GAATGTTCTATCATCAAAAGTATGGGCTACAGAAACCGTCCAAAGACTTTACAGAT 420
DB 480 GAATGTTCTATCATCAAAAGTATGGGCTACAGAAACCGTCCAAAGACTTTACAGAT 539
QY 421 GAACCGAAAAATCCTTCTGCAAGAAACAGTCTAGTGTCCAACTCTTAACCTTGA 480
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QY 1081 TCAGAGAACTCTGATTAATCTGAAAGATGTTCTGTGATTAACCTAAATAGCAGCTTACG 1140
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OY 5581 AGCCACTAC 5589
DB 5700 AGCCACTAC 5708

RESULT 12

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Sequence 1, Application US/08483554B
Patent No. 5747282

GENERAL INFORMATION:

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APPLICANT: Kamp, Alexander
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APPLICANT: Tavelgian, Sean V.
APPLICANT: Wiseman, Roger W.
APPLICANT: Futreal, P. Andrew
TITLE OF INVENTION: 17q-Linked Breast and Ovarian Cancer
TITLE OF INVENTION: Susceptibility Gene
NUMBER OF SEQUENCES: 85
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CITY: Washington
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COUNTRY: USA
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COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/483,554B
FILING DATE: 07-JUN-1995
CLASSIFICATION: 514

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APPLICATION NUMBER: US 08/409,305
FILING DATE: 24-MAR-1995
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APPLICATION NUMBER: US 08/348,824
FILING DATE: 29-NOV-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/308,104
FILING DATE: 16-SEP-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/300,266
FILING DATE: 02-SEP-1994
PRIOR APPLICATION DATA:

APPLICATION DATA:

APPLICATION NUMBER: US 08/289,221
FILING DATE: 12-AUG-1994
ATTORNEY/AGENT INFORMATION:
NAME: Jhenn, Jeffrey L.
REGISTRATION NUMBER: 28,957
REFERENCE/DOCKET NUMBER: 24884-109347
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-962-4810
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INFORMATION FOR SEQ ID NO: 1:

SEQUENCE CHARACTERISTICS:

LENGTH: 5914 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: cDNA
HYPOTHEICAL: NO
ANTI-SENSE: NO
ORIGINAL SOURCE: Homo sapiens
FEATURE:

NAME/KEY: CDS
LOCATION: 120..5708
US-08-483-554B-1

Query Match 99.98; Score 5585.8; DB 1; Length 5914;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 5587; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

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|||||

Db 2160 AGTAAAGCCAAATGAACAGACAGTAAGAAAGACATGACAGCATCTTCCAGAGCTG 2219
QY 2101 AAGTTAAACAAATGACACCTGTTCTTTCTAAGTGTTCATTAATACAGTGAATTAAGAA 2160
Db 2220 AAGTTAAACAAATGACACCTGTTCTTTCTAAGTGTTCATTAATACAGTGAATTAAGAA 2279
QY 2161 TTTGTCAATCTAGGCTTCAGAGAGAGAAAAGAGAAAATAGAAAGTAAAGTG 2220
Db 2280 TTTGTCAATCTAGGCTTCAGAGAGAGAAAAGAGAAAATAGAAAGTAAAGTG 2339
QY 2221 TCTAATATGCTGAAGAGCCCAAGATGTCTGTTAAGTGAAGAAAGGTTTGCAACT 2280
Db 2340 TCTAATATGCTGAAGAGCCCAAGATGTCTGTTAAGTGAAGAAAGGTTTGCAACT 2399
QY 2281 GAAGATCTGTAAGAGTAGAGATTAATTCATTTGATCTGATGATTAATGAGCAGT 2340
Db 2400 GAAGATCTGTAAGAGTAGAGATTAATTCATTTGATCTGATGATTAATGAGCAGT 2459
QY 2341 GAAGATCTGTAAGAGTAGAGATTAATTCATTTGATCTGATGATTAATGAGCAGT 2400
Db 2460 GAAGATCTGTAAGAGTAGAGATTAATTCATTTGATCTGATGATTAATGAGCAGT 2519
QY 2401 TGTGTAGTCAAGTGTGAGCAGATTTGAAAACCCCAAGGAGTAAATTCATGTTGTTCCAA 2460
Db 2520 TGTGTAGTCAAGTGTGAGCAGATTTGAAAACCCCAAGGAGTAAATTCATGTTGTTCCAA 2579
QY 2461 GATTAATGAAGATGACACAGAAAGGCTTAAATGATTCATTTGAGATTAACACAGT 2520
Db 2580 GATTAATGAAGATGACACAGAAAGGCTTAAATGATTCATTTGAGATTAACACAGT 2639
QY 2521 CGGGAACAAACATTAAGAAATGGAAGAAAGTAACTGTGATGCTGATTTGCAAGATCA 2580
Db 2640 CGGGAACAAACATTAAGAAATGGAAGAAAGTAACTGTGATGCTGATTTGCAAGATCA 2699
QY 2581 TTTCAAGTGTCAAGAGCCGACATCTTCTGTTTTCATTAATCCAGAAATGCAAGAG 2640
Db 2700 TTTCAAGTGTCAAGAGCCGACATCTTCTGTTTTCATTAATCCAGAAATGCAAGAG 2759
QY 2641 GAATGTGCAACATCTCTGCCCACCTGAGGCTTAAAGAAACAAATGCAAGATCACT 2700
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Db 2820 TTTGAATGTGAACAAAGAAAGAAATCAAGAAAGATGATGATTAATCAAGGCTGTA 2879
QY 2761 CAGAGATTAATATCACTGAGGCTTCTGTTGTTGCTGAGAAAGTAAAGCAGTGTAT 2820
Db 2880 CAGAGATTAATATCACTGAGGCTTCTGTTGTTGCTGAGAAAGTAAAGCAGTGTAT 2939
QY 2821 AATGCCAAATGATATCAAGAGAGGCTAGGTTTGTCTATCATCTCAGTCAAGAGC 2880
Db 2940 AATGCCAAATGATATCAAGAGAGGCTAGGTTTGTCTATCATCTCAGTCAAGAGC 2999
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Db 3060 CCACACCTTTTCCATCAAGTCAATTTGTTAAACCTAATGTAAGAAAATGCTAGAG 3119
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QY 3121 TCAAGCAATATTAATGAAGTAGTTCAGTACTAATGAATGAGGCTCCAGTATTAATGA 3180
Db 3240 TCAAGCAATATTAATGAAGTAGTTCAGTACTAATGAATGAGGCTCCAGTATTAATGA 3299
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Db	4440	GACCTGCGAAATCCGAAACAAGCAGCATCAGAAAAAGCAGATTAACTTCACGAAAAGT	4499
QY	4381	AGTGAATACCTATTAAGCCAGAAATCCAGAGGCCCTTCTGCTGACAAATTGAGGTGCT	4440
Db	4500	AGTGAATACCTATTAAGCCAGAAATCCAGAGGCCCTTCTGCTGACAAATTGAGGTGCT	4559
QY	4441	GCAGTAACTTCTACCAAGTAAAAATTAACAACAGAGAGGAAAAAGTCAATCCCTCTAAA	4500
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Db	4620	TGCCCATATTAGATGATAGGTGGTACATGACAGATTGCTCTGGGAGTCTTCCAGAAAGA	4679
QY	4561	AACTAACCATCTCAAGAGAGCTCATTAAGTTGTTGATGTGAGAGCAACAGCTGAA	4620
Db	4680	AACTAACCATCTCAAGAGAGCTCATTAAGTTGTTGATGTGAGAGCAACAGCTGAA	4739
QY	4621	GAGTGTGGGCCACAGATTTGACGGAACATCTTACTTGCCAGAGCAAGATCTAGAGGA	4680
Db	4740	GAGTGTGGGCCACAGATTTGACGGAACATCTTACTTGCCAGAGCAAGATCTAGAGGA	4799
QY	4681	ACCCCTTACGTGAATCTGGAATCGAATCGCTCTCTGTGATGACCCCTGAATCTGATCTCT	4740
Db	4800	ACCCCTTACGTGAATCTGGAATCGAATCGCTCTCTGTGATGACCCCTGAATCTGATCTCT	4859
QY	4741	GAAAGCAAGGCCACAGTACAGCTCGTGTGGCAACATACCATCTCAACCTGCAATG	4800
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Db	4920	AAAGTTCGCCAATTGAAAAGTTGCAGAAATCTGCCAGAGTCCAGCTGCTCATACTACT	4979
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QY	5041	ACTGAAGAGACTACTCATGTTGTTATGAAAACAGATGCTGAGTTTGTGTGAAAGGACA	5100
Db	5160	ACTGAAGAGACTACTCATGTTGTTATGAAAACAGATGCTGAGTTTGTGTGAAAGGACA	5219
QY	5101	CTGAATAATTTTCTAGGAATTCGCGGAGGAAATGGGTAGTTAGTACTATTTCTGGGTACC	5160
Db	5220	CTGAATAATTTTCTAGGAATTCGCGGAGGAAATGGGTAGTTAGTACTATTTCTGGGTACC	5279
QY	5161	CAGCTATTAAGAAAGAAAAATCTGATAGATGATTTTGAAGTCAAGGAGAGTGTG	5220
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QY	5221	GTCAATGGAGAAAACACCAAGGTCCAAAAGCGACCAAGAGATCCACAGACAGAAAATC	5280
Db	5340	GTCAATGGAGAAAACACCAAGGTCCAAAAGCGACCAAGAGATCCACAGACAGAAAATC	5399
QY	5281	TTTCAGGGGGCTAGAAATCTGTTGCTATAGGGCCCTTCCACCAAGTCCCAAGATCAACTG	5340
Db	5400	TTTCAGGGGGCTAGAAATCTGTTGCTATAGGGCCCTTCCACCAAGTCCCAAGATCAACTG	5459
QY	5341	GAATGATATGACAGCTGTGTGTGCTTCTGTGTGAAGGAGCTTTCATCATTCACCTT	5400

Db 5460 GAAAGGATGCTACAGCTGTGTGCTCTGTGTGGAAGGAGACCTTCAATTCACCCCTT 5519
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Db 5520 GGACAGAGTGTCCACCAATGTGTGTGAGCAGAGATGCTTGACAGAGAGACATGGC 5579
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Db 5580 TTCCATGCAATTTGGCAGATGTGTGAGCAGCCTGTGTGACCGAGAGTGTGTGAC 5639
Qy 5521 AGTGTAGCACTCTACCAATGTGTGAGCAGCCTGTGTGACCGAGAGTGTGTGAC 5580
Db 5640 AGTGTAGCACTCTACCAATGTGTGAGCAGCCTGTGTGACCGAGAGTGTGTGAC 5699
Qy 5581 AGCCACTAC 5589
Db 5700 AGCCACTAC 5708

RESULT 13
US-08-488-011B-1
Sequence 1, Application US/08488011B
Patent No. 5753441
GENERAL INFORMATION:
APPLICANT: Skolnick, Mark H.
APPLICANT: Goldgar, David E.
APPLICANT: Miki, Yoshio
APPLICANT: Swenson, Jeff
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APPLICANT: Harshman, Keith D.
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APPLICANT: Tavligian, Sean V.
APPLICANT: Wiseman, Roger W.
APPLICANT: Futreal, P. Andrew
TITLE OF INVENTION: 17q-Linked Breast and Ovarian Cancer
TITLE OF INVENTION: Susceptibility Gene
NUMBER OF SEQUENCES: 85
CORRESPONDENCE ADDRESS:
ADDRESSEE: Venable, Baetjer, Howard & Civiletti, LLP
STREET: 1201 New York Avenue, N.W., Suite 1000
CITY: Washington
STATE: DC
COUNTRY: USA
ZIP: 20005
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/488, 011B
FILING DATE: 07-JUN-1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/409,305
FILING DATE: 24-MAR-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/348, 824
FILING DATE: 29-NOV-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/308, 104
FILING DATE: 16-SEP-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/300, 266
FILING DATE: 02-SEP-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/289, 221
FILING DATE: 12-AUG-1994
ATTORNEY/AGENT INFORMATION:
NAME: Ihnen, Jeffrey L.
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REFERENCE/DOCKET NUMBER: 24884-109347-09

TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-962-4810
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INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 5914 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
MOLECULE TYPE: cDNA
HYPOTHETICAL: NO
ANTI-SENSE: NO
ORIGINAL SOURCE:
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: CDS
LOCATION: 120..5708
US-08-488-011B-1

Query Match 99.9%; Score 5585.8; DB 1; Length 5914;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 5587; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 1 ATGGATTATCTGCTCTGCGGCTTGAGAGATACAAAATGTCATTATGCTATGACAGAA 60
Db 120 ATGGATTATCTGCTCTGCGGCTTGAGAGATACAAAATGTCATTATGCTATGACAGAA 179
Qy 61 ATCTAGAGTGTCCATGCTGTGAGTGTGATCAAGAACCTGCTCCACAAAGTGTGAC 120
Db 180 ATCTAGAGTGTCCATGCTGTGAGTGTGATCAAGAACCTGCTCCACAAAGTGTGAC 239
Qy 121 CACATATTTTGCMAATTTTGCATGCTGAACTTCTCAACGAGAAAGAGGCTTTCACAG 180
Db 240 CACATATTTTGCMAATTTTGCATGCTGAACTTCTCAACGAGAAAGAGGCTTTCACAG 299
Qy 181 TGCTCTTATGTAGATATATACCAAAAGAGGCTTTCACAAAGAAATAGAGATTAGT 240
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Qy 241 CAACCTGTGGAAGAGCTATGAAATCATTTGCTTTTACGTTGACACAGGTTTGAG 300
Db 360 CAACCTGTGGAAGAGCTATGAAATCATTTGCTTTTACGTTGACACAGGTTTGAG 419
Qy 301 TATGCAAAAGCTATATTTTGCMAAAAGAGAAATACCTCTGTAACATCTAAAGAT 360
Db 420 TATGCAAAAGCTATATTTTGCMAAAAGAGAAATACCTCTGTAACATCTAAAGAT 479
Qy 361 GAAGTTTATCATCCAAAGATATGGCTACAGAAACCGTGCCAAAGAAATCTTACAGAGT 420
Db 480 GAAGTTTATCATCCAAAGATATGGCTACAGAAACCGTGCCAAAGAAATCTTACAGAGT 539
Qy 421 GAACCCGAAATCTCTCTTCCAGAAACAGTCTAGTGTCCAACTCTTAACCTTGA 480
Db 540 GAACCCGAAATCTCTCTTCCAGAAACAGTCTAGTGTCCAACTCTTAACCTTGA 559
Qy 481 ACTGTGAGACTGTGAGACAAAGAGGAGTATCAACCTCAAAAGAGCTGTCTACATT 540
Db 600 ACTGTGAGACTGTGAGACAAAGAGGAGTATCAACCTCAAAAGAGCTGTCTACATT 659
Qy 541 GAATGGAGTGTGATTTCTGTGAGATACGCTTAATAGGCAACTTATTCAGATGGGA 600
Db 660 GAATGGAGTGTGATTTCTGTGAGATACGCTTAATAGGCAACTTATTCAGATGGGA 719
Qy 601 GATCAAGATTTGTACAAATCACCCCTCAAGAAACAGGATGAAATCACTTTGATTC 660
Db 720 GATCAAGATTTGTACAAATCACCCCTCAAGAAACAGGATGAAATCACTTTGATTC 779
Qy 661 GCAAAAAAGGCTGCTGTGAAATTTTGTGAAGAGATGTAAACAATCTGAACATCATCA 720
Db 780 GCAAAAAAGGCTGCTGTGAAATTTTGTGAAGAGATGTAAACAATCTGAACATCATCA 839
Qy 721 CCCAGTATATATGATTTGAACACACCTGAAAGAGTGCACCTAGAGGATTCAGAAAG 780

Db 840 CCCAGTATATGATTTGTAACACCACCTAGAGAGGCTGACGCTGAGAGGCATCCAGAAAG 899
Qy 781 TATCAGGTAATCTGTTTCAAACTTGATGTGAGCCATGTGGCACAATACTCATGCC 840
Db 900 TATCAGGTAATCTGTTTCAAACTTGATGTGAGCCATGTGGCACAATACTCATGCC 959
Qy 841 AGCTCATACAGCATGAGACAGCAGTTTATTACACATAAAGACAGAAATGATGTAA 900
Db 960 AGCTCATACAGCATGAGACAGCAGTTTATTACACATAAAGACAGAAATGATGTAA 1019
Qy 901 AAGGCTGAATTCCTGTAATTAAGCAACAGCCTGGCTTAGCAGAGAGCCAACTATACGA 960
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Qy 961 TGGGCTGGAAGTAAGGAAACATGTATGATAGCGGAGCTCCAGACAGAAAGTA 1020
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Qy 1021 GATCTGAATGCTGATCCCTGTGTGAGAGAAAGAAATGSAATTAAGCAGAACTGGCATGC 1080
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Qy 1081 TCAGAGAACTCTAGAGATCTGAAAGATGCTCTTGATTAACACTAAATAGCAGATTCAG 1140
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Qy 1261 GAATATCTGCTTCTCAGAGAAATAGACTTACTGGCAGTATCTCATGAGCTTAA 1320
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Qy 1321 ATATGTAAGTGAAGAGTTCACCTCCAAATCAGTAGAGATATATATGAGACAAATA 1380
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Db 1860 AAAAGCAAGCTGAACCTATTAAGCAGCAGTATTAAGCATATGAACTGAAATTAATATC 1919
Qy 1801 CACAAATTCAGAAAGCACTTAAGAAATAGGCTGAGAGGAAAGTCTTCTACAGGCAATTT 1860
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Qy 1861 CATGCGCTTGAACTAGTACTAGTACGATGAAATCTTAAGCCCACTTAATGTACTGAATGCA 1920
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Qy 1921 ATTGATAGTCTTCTAGCAGTGAAGAGATTAAGAAAAAGTACAACTAATGCGACATC 1980
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Db 2100 AGGCACAGCAGAAACCTACAACTCATGGAAGTAAAGAACTGCAACTGGAGCCAAAG 2159
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Qy 2221 TCTAATATGCTGAAGAACCCCAAGATCTCATGTTAAGTGGAGAAAGGCTTTCGCAACT 2280
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Qy 2521 CGGGAACACACATGAAATGGAAGAAAGTGAAGTGTGCTCAGTATTTGCAAGATACA 2580
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Qy 2701 TTTGAATGTGAACAAAGAAAGAAATTCAGAGAAAGATGAGTCTAATATACCGCTGA 2760
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QY 2941 CCACCACTTTTCCCATGAGTCTGTTAAACTAAATGTAAGAAAAATGCTAGAG 3000
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QY 3601 GGTTCACGAGAGAGGGGCCAAGAAATTAAGTCTCAGAGAGAACTATCTAGAGAGAT 3660
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QY 3721 TCTACTAGGCAATAGCACCGTGTCTACCGAGTGTCTGTAGAAACACAGAGAGAAATTA 3780
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Db 3900 TTATCATTTGAAGATTAAGTAAATGACTGCAATTAACAGGTAAATTTGGCAAAAGCATCT 3959
QY 3841 CAGGAACATCACTTAGGAGAGAAACAAATGTTCTGTACTGTTTCTTTCACAGAGC 3900
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Db 3960 CAGGAACATCACTTAGGAGAGAAACAAATGTTCTGTACTGTTTCTTTCACAGAGC 4019
QY 3901 AGTGAATTTGGAAGACTGACGCAAAATCAAAACACCCAGATCTCTTCTTGATGGTCT 3960
|||||
Db 4020 AGTGAATTTGGAAGACTGACGCAAAATCAAAACACCCAGATCTCTTCTTGATGGTCT 4079
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Db	5700	AGCCACTTAC 570.8	

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1  APPLICATION NUMBER: US 08/348,824
2  FILING DATE: 29-NOV-1994
3  PRIOR APPLICATION DATA:
4  APPLICATION NUMBER: US 08/308,104
5  FILING DATE: 16-SEP-1994
6  PRIOR APPLICATION DATA:
7  APPLICATION NUMBER: US 08/300,266
8  FILING DATE: 02-SEP-1994
9  PRIOR APPLICATION DATA:
10 APPLICATION NUMBER: US 08/289,221
11 FILING DATE: 12-AUG-1994
12 ATTORNEY/AGENT INFORMATION:
13 NAME: Ihnen, Jeffrey L.
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15 REFERENCE/DOCKET NUMBER: 24884-109347
16 TELECOMMUNICATION INFORMATION:
17 TELEPHONE: 202-962-4810
18 TELEFAX: 202-962-8300
19 INFORMATION FOR SEQ ID NO: 1:
20 SEQUENCE CHARACTERISTICS:
21 LENGTH: 5914 base pairs
22 TYPE: nucleic acid
23 STRANDEDNESS: double
24 TOPOLOGY: linear
25 MOLECULE TYPE: cDNA
26 HYPOTHETICAL: NO
27 ANTI-SENSE: NO
28 ORIGINAL SOURCE:
29 ORGANISM: Homo sapiens
30 FEATURE:
31 NAME/KEY: CDS
32 LOCATION: 120..5708
33 US-08-850-727-1

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RESULT 14
 US-08-850-727-1
 Sequence 1, Application US/08850727
 Patent No. 6162897
 GENERAL INFORMATION:
 APPLICANT: Skolnick, Mark H.
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 APPLICANT: Miki, Yoshio
 APPLICANT: Swenson, Jeff
 APPLICANT: Kamb, Alexander
 APPLICANT: Harshtman, Keith D.
 APPLICANT: Shattuck-Eidens, Donna M.
 APPLICANT: Tavligian, Sean V.
 APPLICANT: Wiseman, Roger W.
 APPLICANT: Futreal, P. Andrew
 TITLE OF INVENTION: 17q-Linked Breast and Ovarian Cancer
 TITLE OF INVENTION: Susceptibility Gene
 NUMBER OF SEQUENCES: 85
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Venable, Baetjer, Howard & Civiletti, LLP
 STREET: 1201 New York Avenue, N.W., Suite 1000
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 COUNTRY: USA
 ZIP: 20005
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Patentln Release #1.0, Version #1.30
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/850,727
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 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/483,554
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 PRIOR APPLICATION DATA:

	Best Local Similarity	100.0%	Pred. No. 0;	
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Db 4380 CATGGAGCCAGCCCTTCTAACAGCTTACCATCAATAGTACTTTCGCCCTGAG 4439
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QY 4321 GACTGCGCAATTCAGAAACAAACACATCAGAGAAAGAGATTAATCTTACAGAAAGT 4380
|||||
Db 4440 GACTGCGCAATTCAGAAACAAACACATCAGAGAAAGAGATTAATCTTACAGAAAGT 4499
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QY 4381 AGTGAATACCTTATTAAGCAAGATCCAGAAAGCCCTTCTGCGAACAAGTTGAGGTGCT 4440
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Db 4500 AGTGAATACCTTATTAAGCAAGATCCAGAAAGCCCTTCTGCGAACAAGTTGAGGTGCT 4559
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QY 4441 GCAGATAGTTTACAGTAAATTAAGAAACAGAGAGTGAAGAGTCAATCCCTCTTAA 4500
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Db 4560 GCAGATAGTTTACAGTAAATTAAGAAACAGAGAGTGAAGAGTCAATCCCTCTTAA 4619
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QY 4501 TGCCCATCATTAATGATAGTGTGATACGACAGTGTCTGAGAGTCTTACAGAAATGA 4560
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Db 4620 TGCCCATCATTAATGATAGTGTGATACGACAGTGTCTGAGAGTCTTACAGAAATGA 4679
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QY 4561 AACTACCATCTCAAGAGAGAGCTCATTAAGGTTGTGATGTGGAGAGCAACAGCTGGAA 4620
|||||
Db 4680 AACTACCATCTCAAGAGAGAGCTCATTAAGGTTGTGATGTGGAGAGCAACAGCTGGAA 4739
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QY 4621 GAGTCTGGGCCACAGATTTGACGGAACATCTTACTTCCCAAGGCAAGATCTAGAGGA 4680
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Db 4740 GAGTCTGGGCCACAGATTTGACGGAACATCTTACTTCCCAAGGCAAGATCTAGAGGA 4799
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QY 4681 ACCCCTTACCTGGAATCTGGAATCAGCCTCTTCTGTATGACCTGTAATCTGATCTTCT 4740
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Db 4800 ACCCCTTACCTGGAATCTGGAATCAGCCTCTTCTGTATGACCTGTAATCTGATCTTCT 4859
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QY 4741 GAAAGCAGAGCCCAAGAGTCAAGTCTGTGGCAACATACATCTTCAACCTCTGACATG 4800
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QY 4801 AAGGTTCCCAATTTGAAGTTTGCAGAAATCTGCCAGAGTCCAGCTGTGCTCATACTACT 4860
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QY 4861 GATACCTGCTGGGTATTAATGCAATGAAAGAAAGTGTGACAGAGGAAAGCCAGAAATGACA 4920
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Db 4980 GATACCTGCTGGGTATTAATGCAATGAAAGAAAGTGTGACAGAGGAAAGCCAGAAATGACA 5039
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QY	4921	GCTTCAACAGAAAGGGTCAACAAAAGATGTCATGATGGGTGCTGGCTACCCACGAA	4980
Db	5040	GCTTCAACAGAAAGGGTCAACAAAAGATGTCATGATGGGTGCTGGCTACCCACGAA	5099
QY	4981	GAATTTATGCTGCTGTACAAAGTTTCCAGAAAACCCACATCACTTAACTAATCTAAT	5040
Db	5100	GAATTTATGCTGCTGTACAAAGTTTCCAGAAAACCCACATCACTTAACTAATCTAAT	5159
QY	5041	ACTGAAGAGACTACTACATGTTGTTATGAAAACAGATGCTGATGTTGTGTGAAACGGCA	5100
Db	5160	ACTGAAGAGACTACTACATGTTGTTATGAAAACAGATGCTGATGTTGTGTGAAACGGCA	5219
QY	5101	CTGAATATTTTCTGTAGAAATTCGCGAGAGAAAATGGATGTTAGCTAATTTCTGGGTGACC	5160
Db	5220	CTGAATATTTTCTGTAGAAATTCGCGAGAGAAAATGGATGTTAGCTAATTTCTGGGTGACC	5279
QY	5161	CAGTCTATTTAAAGAAAAGAAAAATGCTGAATGAGCATGTTTGAAGTCCAGAGAGATGTG	5220
Db	5280	CAGTCTATTTAAAGAAAAGAAAAATGCTGAATGAGCATGTTTGAAGTCCAGAGAGATGTG	5339
QY	5221	GTCATATGGAAGAAAACCCACCAAGTTCCAAAGCGAGCAGAGAAATGCCAGAGACAAAGATC	5280
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QY	5281	TTCAAGGGGGCTAGAAAATCTGTTGCTATGAGGCCCTTCACCAACATGCCACAGATCACTG	5340
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QY	5341	GAATGATGATGACACGCTGTGTGCTCTGTGTGTGAAGAGACCTTCATCACTCACCCCT	5400
Db	5460	GAATGATGATGACACGCTGTGTGCTCTGTGTGTGAAGAGACCTTCATCACTCACCCCT	5519
QY	5401	GGCAGAGGTGCCACCCAAATGTGGTGTGAGCAGATGGCTGGACAGAGACAAATGGC	5460
Db	5520	GGCAGAGGTGCCACCCAAATGTGGTGTGAGCAGATGGCTGGACAGAGACAAATGGC	5579
QY	5461	TTCCATGCAATTGGGACAGATGTGTGAGGACACCTGTGTGTGACCCGAGATGGGTGTTGAC	5520
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QY	5521	AGGTAGACACTCTACCAATGCCAGAGGTGCACACCTACCTGATACCCAGATCCCCAC	5580
Db	5640	AGGTAGACACTCTACCAATGCCAGAGGTGCACACCTACCTGATACCCAGATCCCCAC	5699
QY	5581	AGCCACCTAC 5589	
Db	5700	AGCCACCTAC 5708	
RESULT 15			
PCT-US95-10202-1			
Sequence 1, Application PC/TUS9510202			
GENERAL INFORMATION:			
APPLICANT: Shattuck-Eidens, Donna M.			
APPLICANT: Simard, Jacques			
APPLICANT: Eml, Mitsuru			
APPLICANT: Nakamura, Yunsuke			
APPLICANT: Durocher, Francine			
TITLE OF INVENTION: In Vivo Mutations and Polymorphisms			
TITLE OF INVENTION: In the 17q-Linked Breast and Ovarian Cancer			
NUMBER OF SEQUENCES: 85			
CORRESPONDENCE ADDRESS:			
ADDRESSEE: Venable, Baetjer, Howard & Civiletti, LLP			
STREET: 1201 New York Avenue, N.W., Suite 1000			
CITY: Washington			
STATE: DC			
COUNTRY: USA			
ZIP: 20005			
COMPUTER READABLE FORM:			
MEDIUM TYPE: Floppy disk			
COMPUTER: IBM PC compatible			

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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US95/10202
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US
FILING DATE: 07-JUN-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/409,305
FILING DATE: 24-MAR-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/348,824
FILING DATE: 29-NOV-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08-308,104
FILING DATE: 16-SEP-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/300,266
FILING DATE: 02-SEP-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/289,221
FILING DATE: 12-AUG-1994
ATTORNEY/AGENT INFORMATION:
NAME: Ihnen, Jeffrey L.
REGISTRATION NUMBER: 28,957
REFERENCE/DOCKET NUMBER: 24884-109347
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-962-4810
TELEFAX: 202-962-8300
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 5914 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: cDNA
HYPOTHEetical: NO
ANTI-SENSE: NO
ORIGINAL SOURCE:
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: CDS
LOCATION: 120..5711
PCT-US95-10202-1

Query Match 99.9%; Score 5585.8; DB 5; Length 5914;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 5587; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

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QY 61 ATCTTAGAGATGCCATGTGCTGAGAGTATCAAGAAACCTCTCCCAAGGTGAC 120
Db 180 ATCTTAGAGATGCCATGTGCTGAGAGTATCAAGAAACCTCTCTCCCAAGGTGAC 239
QY 121 CACATATTTTGAATTTTGCATGCTGAAAATTCTCAACAGAAAGAAAGGCGCTTCACAG 180
Db 240 CACATATTTTGAATTTTGCATGCTGAAAATTCTCAACAGAAAGAAAGGCGCTTCACAG 299
QY 181 TGTCTTTATGTAGATGATATTAACCAAAAGAGCCTACAGAAAGTACGAGATTAGT 240
Db 300 TGTCTTTATGTAGATGATATTAACCAAAAGAGCCTACAGAAAGTACGAGATTAGT 359
QY 241 CAACGTGTGAAGAGCCTATGAAATCATTTGTGCTTTGAGTTACACAGAGTTGGAG 300
Db 360 CAACGTGTGAAGAGCCTATGAAATCATTTGTGCTTTGAGTTACACAGAGTTGGAG 419
QY 301 TATGCAAAACAGCTATATTTTGCAAAAAAGAAATTAACCTCTCGTAACATCTAAAGAT 360

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Db 480 GAAGTTCTATCAACCAAGATATGGGCTACAGAAACCGTGGCAAAAGACTTCTACAGAGT 539
QY 421 GAACCCGAAATCCCTCTTCAGAGAAACAGCTGCTCACTGTCACAACTCTCTACCTTGA 480
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QY 481 ACTGTGAGAACTGTAGAGCAAAAGCAGGATACAACTCAAAAGACGCTGTCTACATT 540
Db 600 ACTGTGAGAACTGTAGAGCAAAAGCAGGATACAACTCAAAAGACGCTGTCTACATT 659
QY 541 GAATTTGGATCTGATCTCTTGAAGATACCGTTAATAGGCACTTATTGCAAGTGGGA 600
Db 660 GAATTTGGATCTGATCTCTTGAAGATACCGTTAATAGGCACTTATTGCAAGTGGGA 719
QY 601 GATCAGAAATTTGTTACAAATCACCCCTCAAGAACAGGATGAATCAGTTTGGATTCT 660
Db 720 GATCAGAAATTTGTTACAAATCACCCCTCAAGAACAGGATGAATCAGTTTGGATTCT 779
QY 661 GCAAAAAAGGCTGCTGTGAAATTTTCTGAGACGATGTAAACAATACTGAAACATCATCA 720
Db 780 GCAAAAAAGGCTGCTGTGAAATTTTCTGAGACGATGTAAACAATACTGAAACATCATCA 839
QY 721 CCCAGTATATGATTTGAAACACACGATGAGAAAGGCTGAGAGGCACTCCAGAAAG 780
Db 840 CCCAGTATATGATTTGAAACACACGATGAGAAAGGCTGAGAGGCACTCCAGAAAG 899
QY 781 TATCAGGGTATGTTCTGTTTCAAACTTGATGTGAGCCATGTGGCACAAATACATCC 840
Db 900 TATCAGGGTATGTTCTGTTTCAAACTTGATGTGAGCCATGTGGCACAAATACATCC 959
QY 841 AGCTCATATTACGATGAGACAGCACTTATTACTCACTAAAGACAGATATGTAGAA 900
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QY 901 AAGGCTGAATCTGTAATTAAGCAACAGCCTGGCTTAGCAAGAGGCAACATPAACGA 960
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QY 961 TGGGCTGGAAGTAAAGAAACATGTATGATAGGCGGATCCACACAGAAAAAGGTA 1020
Db 1080 TGGGCTGGAAGTAAAGAAACATGTATGATAGGCGGATCCACACAGAAAAAGGTA 1139
QY 1021 GATCTGAATGCTGATCCCTGCTGTGAGAGAAAGATGAATTAAGCAGAACTGCCATGC 1080
Db 1140 GATCTGAATGCTGATCCCTGCTGTGAGAGAAAGATGAATTAAGCAGAACTGCCATGC 1139
QY 1081 TCAGAGATCCTAGAGATGATGAGATGTTCTTGATTAACATTAATAGCAGATTCAG 1140
Db 1200 TCAGAGATCCTAGAGATGATGAGATGTTCTTGATTAACATTAATAGCAGATTCAG 1259
QY 1141 AAAGTTATGAGTGTTTTCAGAGATGATGATGTTAGGTTCTGATGATCACTCATGAT 1200
Db 1260 AAAGTTATGAGTGTTTTCAGAGATGATGATGTTAGGTTCTGATGATCACTCATGAT 1319
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Db 1320 GGGGAGTCTGAATCAATGCCAAAGTACGATATATTGACGTTCTTAATGAGGTAGAT 1379
QY 1261 GAATATTTCTGGTTCTTACAGAGAAATGACTTACTGGCAGTGTACTCCATGAGGCTTTA 1320
Db 1380 GAATATTTCTGGTTCTTACAGAGAAATGACTTACTGGCAGTGTACTCCATGAGGCTTTA 1439
QY 1321 ATATGTAAGTGAAGAGTTCACTCCAAATCAGTAGAGATTAATTTGAAGACAAATA 1380
Db 1440 ATATGTAAGTGAAGAGTTCACTCCAAATCAGTAGAGATTAATTTGAAGACAAATA 1499
QY 1381 TTTTGGAAAACTTATCGGAGAGAGGCAAGCTCCCAACTTAAGCCATGTAAGTAAAT 1440
Db 1500 TTTTGGAAAACTTATCGGAGAGAGGCAAGCTCCCAACTTAAGCCATGTAAGTAAAT 1559

QY 1441 CTAATTTATGAGAGATTTGTTACTGAGCCACAGATTAATACAGAGCGTCCCTCACAAT 1500
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QY 1501 AAATTTAAAGCGTTAAAGAGAGACTCTACAGGCGCTTCACTCTGAGATTTTATCAAGAA 1560
Db 1620 AAATTTAAAGCGTTAAAGAGAGACTCTACAGGCGCTTCACTCTGAGATTTTATCAAGAA 1679
QY 1561 GCAGATTTTGGAGTTCAAAAGACTCTGAAATGATAAATCAGGGAATTAACCAAGGAG 1620
Db 1680 GCAGATTTTGGAGTTCAAAAGACTCTGAAATGATAAATCAGGGAATTAACCAAGGAG 1739
QY 1621 CAGATGCTCAAGATGATTAATTTATTAATAGTGGTCTATGGAATTAACCAAGGAT 1680
Db 1740 CAGATGCTCAAGATGATTAATTTATTAATAGTGGTCTATGGAATTAACCAAGGAT 1799
QY 1681 TCTATTTCAAGATGAGAAAAATCTTAACCAATAGATCAGTCAAAAAAGAAATCTCTTC 1740
Db 1800 TCTATTTCAAGATGAGAAAAATCTTAACCAATAGATCAGTCAAAAAAGAAATCTCTTC 1859
QY 1741 AAAAGAAAGCTGAACCTATATAGCAGATATAGCAATATGGAATGAAATATATC 1800
Db 1860 AAAAGAAAGCTGAACCTATATAGCAGATATAGCAATATGGAATGAAATATATC 1919
QY 1801 CACATTTCAAAAGCACTTAAAGAAATAGGCTGAGAGAGAGTCTTCAACAGGCAATT 1860
Db 1920 CACATTTCAAAAGCACTTAAAGAAATAGGCTGAGAGAGAGTCTTCAACAGGCAATT 1979
QY 1861 CATGGCTTGAACAGTATAGTATGAAATCTAAGCCCACTTAATTTACTGAAATGCA 1920
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QY 1921 ATTGATGTTGTTCTAGCAGTGAAGATTAAGAAAAAGTATACCAATATGCCATGC 1980
Db 2040 ATTGATGTTGTTCTAGCAGTGAAGATTAAGAAAAAGTATACCAATATGCCATGC 2099
QY 1981 AGGCACAGCAGAAACCTCAACTCATGGAAGTAAAGACCTGCAATGAGCCAAAG 2040
Db 2100 AGGCACAGCAGAAACCTCAACTCATGGAAGTAAAGACCTGCAATGAGCCAAAG 2159
QY 2041 AGTAACAAGCCAAATGAACAGACAAATGAAGACATGACAGTACTTCCAGAGCTG 2100
Db 2160 AGTAACAAGCCAAATGAACAGACAAATGAAGACATGACAGTACTTCCAGAGCTG 2219
QY 2101 AAGTTAACAAATGCACTGCTTCTTTACTAAGTGTCAATTAACAGTAACTTAAGAA 2160
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QY 2161 TTTGTCATCCTAGCCTTCCAAAGAGAAAGAAAGAAAGAACTGAAGAACTTAAAGTG 2220
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QY 2221 TCTATATATGCTGAAGACCCCAAGATCTCATGTTAAGTGAAGAAAGGCTTTTCAACT 2280
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QY 2281 GAAAGATCTGTAAGAGATGAGATGATTTTCACTTGTACTGATGATTAAGCACTGAG 2340
Db 2400 GAAAGATCTGTAAGAGATGAGATGATTTTCACTTGTACTGATGATTAAGCACTGAG 2459
QY 2341 GAAAGTATCTGCTTACTGGAAGTATAGCACTCTAGGGAAGGCAAAAGCAAGCAATTA 2400
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QY 2401 TGTGTGAGTCAAGTGTGAGCAATTTGAAAAACCCCAAGGACTAATTCATGTTTCCAAA 2460
Db 2520 TGTGTGAGTCAAGTGTGAGCAATTTGAAAAACCCCAAGGACTAATTCATGTTTCCAAA 2579
QY 2461 GATTAATGAAATGACACAGAAAGGCTTTAAGTATCATTTGGACATGAAGTTAACCAAGT 2520
Db 2580 GATTAATGAAATGACACAGAAAGGCTTTAAGTATCATTTGGACATGAAGTTAACCAAGT 2639

OY	2521	CGGGAAACAAGCATGTAAGTAATGGAGAAAGTGAACCTGATGCTCAGATATTCCACAATACA	2580
Db	2640	CGGGAAACAAGCATGTAAGTAATGGAGAAAGTGAACCTGATGCTCAGATATTCCACAATACA	2699
OY	2581	TTCAAGGTTTCAAAGCGCCAGTCATCTCTGTTTTCAAATCCAGGAAATGCGAAGAG	2640
Db	2700	TTCAAGGTTTCAAAGCGCCAGTCATCTCTGTTTTCAAATCCAGGAAATGCGAAGAG	2759
OY	2641	GAATGTGCACATTTCTGTGCCACTCTGGGTCTTTAAAGAAACAAAGTCCAAAAGTCACT	2700
Db	2760	GAATGTGCACATTTCTGTGCCACTCTGGGTCTTTAAAGAAACAAAGTCCAAAAGTCACT	2819
OY	2701	TTTGAATGTGAAACAAAGGAAAGAAAATCAAGGAAAGATGAGTCTAATATCAACCTGTA	2760
Db	2820	TTTGAATGTGAAACAAAGGAAAGAAAATCAAGGAAAGATGAGTCTAATATCAACCTGTA	2879
OY	2761	CAGACAGTAAATATCATCTGCAGAGGCTTCTGTGTGTGTCAGAAAGATTAACCCAGTTGAT	2820
Db	2880	CAGACAGTAAATATCATCTGCAGAGGCTTCTGTGTGTGTCAGAAAGATTAACCCAGTTGAT	2939
OY	2821	AATGCCAAATGTAGTATCAAAAGAGAGCTCTAGTTTTGTCTATCATCTCACTTCAGAGGC	2880
Db	2940	AATGCCAAATGTAGTATCAAAAGAGAGCTCTAGTTTTGTCTATCATCTCACTTCAGAGGC	2999
OY	2881	AACGAAATGTGCATCTATTCTCCAAATTAACATGAGCTTTTACAAAACCCATATGCTATA	2940
Db	3000	AACGAAATGTGCATCTATTCTCCAAATTAACATGAGCTTTTACAAAACCCATATGCTATA	3059
OY	2941	CCACCACCTTTTCCCATCAGTCAATGTGTGTTAAACTAAATGTAGAAAAATCTGCTAGAG	3000
Db	3060	CCACCACCTTTTCCCATCAGTCAATGTGTGTTAAACTAAATGTAGAAAAATCTGCTAGAG	3119
OY	3001	GAATTCCTTGAGGAACATTCAATGTCACCTGAAGAGAGAAATGGGAAATGAGAACATTCCA	3060
Db	3120	GAATTCCTTGAGGAACATTCAATGTCACCTGAAGAGAGAAATGGGAAATGAGAACATTCCA	3179
OY	3061	AGTACAGTGCAGACCAATTAGCCGTAATPACATTAGAGAAATGTTTTTAAAGAACCCAGC	3120
Db	3180	AGTACAGTGCAGACCAATTAGCCGTAATPACATTAGAGAAATGTTTTTAAAGAACCCAGC	3239
OY	3121	TCAAGCATATTTAATGAAGTGGTTCGCTACTATGAAGTGGGCTCAGATATTAAGAA	3180
Db	3240	TCAAGCATATTTAATGAAGTGGTTCGCTACTATGAAGTGGGCTCAGATATTAAGAA	3299
OY	3181	ATAGGTTCCAGTGTGAAACATTTCAAGCAGACAGTGTAGAAAACAGAGGGCCAAAATTG	3240
Db	3300	ATAGGTTCCAGTGTGAAACATTTCAAGCAGACAGTGTAGAAAACAGAGGGCCAAAATTG	3359
OY	3241	AATGCTATGCTTACATTAGGGGTTTTTGCACCTGAGTCTATAACAAAGCTTCTCTGGA	3300
Db	3360	AATGCTATGCTTACATTAGGGGTTTTTGCACCTGAGTCTATAACAAAGCTTCTCTGGA	3419
OY	3301	AGTATATTGTAAAGCATCTCGAATTTAAAAAGCAACAATATGAAGAAAGTGTACAGACGT	3360
Db	3420	AGTATATTGTAAAGCATCTCGAATTTAAAAAGCAACAATATGAAGAAAGTGTACAGACGT	3479
OY	3361	AATACAGATTTCTCTCCATATCTATCTATTTACAGATTAAGTAAACAGCCTATAGGAAGTGT	3420
Db	3480	AATACAGATTTCTCTCCATATCTATCTATTTACAGATTAAGTAAACAGCCTATAGGAAGTGT	3539
OY	3421	CATGCATCTCAGGTTTTGTTCTGAGACACCTGATGACCTGTTAGATGATGGTGAATTAAG	3480
Db	3540	CATGCATCTCAGGTTTTGTTCTGAGACACCTGATGACCTGTTAGATGATGGTGAATTAAG	3599
OY	3481	GAAGTACTACTTTTGGCGAAATGACATTPAAGAAAGTTCTGCTGTTTTTACAAAAGC	3540
Db	3600	GAAGTACTACTTTTGGCGAAATGACATTPAAGAAAGTTCTGCTGTTTTTACAAAAGC	3659
OY	3541	GTCGAGAAAGAGAGCTTAGCAGAGAGTCTAGCCCTTCAACCATTAACATTTGGGCTCAG	3600
Db	3660	GTCGAGAAAGAGAGCTTAGCAGAGAGTCTAGCCCTTCAACCATTAACATTTGGGCTCAG	3719
OY	3601	GGTTACCGAAGAGGGGCCAAGAAATTTAGAGTCTCCACAAGAGAACTTATCTAGTGAGAT	3660

Db	3720	GGTATCCGAAAGGGGGCCAGAAATTAAGTCTCAGAGAGAACTTATCTAGAGGAT	3779
Qy	3661	GAGAGCTTCCCTGCTTCCAAACACTGTTATTGGTAAAGTAAACAAATATACCTTCAC	3720
Db	3780	GAGAGCTTCCCTGCTTCCAAACACTGTTATTGGTAAAGTAAACAAATATACCTTCAC	3639
Qy	3721	TCTACTAGGATAGCAGCGGTGCTACGAGTGTCTGTAAAGAACACAGAGAGAAATTA	3780
Db	3840	TCTACTAGGATAGCAGCGGTGCTACGAGTGTCTGTAAAGAACACAGAGAGAAATTA	3899
Qy	3781	TTATCATGGAAGTAAAGCTTAAAGTACGCGAGTAAACAGTAATATTTGGCAAGGCATCT	3840
Db	3900	TTATCATGGAAGTAAAGCTTAAAGTACGCGAGTAAACAGTAATATTTGGCAAGGCATCT	3959
Qy	3841	CAGAAACATCACCTTAGTAGAGAAACAAAAGTTCTGCTAGCTGTTTCTCACAATGC	3900
Db	3960	CAGAAACATCACCTTAGTAGAGAAACAAAAGTTCTGCTAGCTGTTTCTCACAATGC	4019
Qy	3901	AGTGAATTTGGAAGACTTACTGTCAAATACAAACACCCAGATCCCTTTCTGATTGGTCT	3960
Db	4020	AGTGAATTTGGAAGACTTACTGTCAAATACAAACACCCAGATCCCTTTCTGATTGGTCT	4079
Qy	3961	TCCAAACAAATAGGCAATCATCTGTAAAGCCAGGAGTGGTCTGATGACAAAGATTG	4020
Db	4080	TCCAAACAAATAGGCAATCATCTGTAAAGCCAGGAGTGGTCTGATGACAAAGATTG	4139
Qy	4021	GTTTACATGATGAAGAAAGAGAAACGGGCTTGGAAAGAAATATTCAGAAAGACAAGC	4080
Db	4140	GTTTACATGATGAAGAAAGAGAAACGGGCTTGGAAAGAAATATTCAGAAAGACAAGC	4199
Qy	4081	ATGATTCMAACTTAAAGTGAAGCAGCATCTGGGTGTAGAGTGAACAAACGCTCTGAA	4140
Db	4200	ATGATTCMAACTTAAAGTGAAGCAGCATCTGGGTGTAGAGTGAACAAACGCTCTGAA	4259
Qy	4141	GACTGCTAGGGCTATCTCTCAGAGTACATTTTAAACCACTACGACAGAGGATACCATG	4200
Db	4260	GACTGCTAGGGCTATCTCTCAGAGTACATTTTAAACCACTACGACAGAGGATACCATG	4319
Qy	4201	CAACATACTGATTAAGCTCCAGAGAGAAATGGCTGATAGAAAGCTGTATTAGAACAG	4260
Db	4320	CAACATACTGATTAAGCTCCAGAGAGAAATGGCTGATAGAAAGCTGTATTAGAACAG	4379
Qy	4261	CATGGGAGCCAGCCTTCTTAACAGCTACCCCTTCATCAATATGATGACTCTTCTGCCCTT	4320
Db	4380	CATGGGAGCCAGCCTTCTTAACAGCTACCCCTTCATCAATATGATGACTCTTCTGCCCTT	4439
Qy	4321	GACCTGGCAATTCAGAAACAAAGCATCAGAAAAGCAGTATTAACTTACACGAAAAGT	4380
Db	4440	GACCTGGCAATTCAGAAACAAAGCATCAGAAAAGCAGTATTAACTTACACGAAAAGT	4499
Qy	4381	AGTGAATTCCTTATTAAGCCAGAAATCCAGAAAGCCTTCTGCTGCAAGTTTGAGGTCT	4440
Db	4500	AGTGAATTCCTTATTAAGCCAGAAATCCAGAAAGCCTTCTGCTGCAAGTTTGAGGTCT	4559
Qy	4441	GCAGATAGTCTTACCAGTAAAAATTAAGAACACAGAGTGAAGAAAGTCACTCCCTTCAA	4500
Db	4560	GCAGATAGTCTTACCAGTAAAAATTAAGAACACAGAGTGAAGAAAGTCACTCCCTTCAA	4619
Qy	4501	TGCCCATCATTAAGATAGTGGTACATGCACAGTTGCTCTGGAGCTCTTCAGAAATAGA	4560
Db	4620	TGCCCATCATTAAGATAGTGGTACATGCACAGTTGCTCTGGAGCTCTTCAGAAATAGA	4679
Qy	4561	AACATACCATTCAGAGAGAGCTATTAAGTTGTATATGTGAGAGGACAAAGCTTGAA	4620
Db	4680	AACATACCATTCAGAGAGAGCTATTAAGTTGTATATGTGAGAGGACAAAGCTTGAA	4739
Qy	4621	GAGTCTGGGACACAGATTGACGAAACATCTTACTTGGCAAGGCAAGATCTAGAGGGG	4680
Db	4740	GAGTCTGGGACACAGATTGACGAAACATCTTACTTGGCAAGGCAAGATCTAGAGGGG	4799
Qy	4681	ACCCCTTACCTGGAATCTGGAATAGCCTTCTCTGATACCCCTGAATCTGATCCCTCT	4740

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Db 4800 ACCCCTACGTGAATCTGAATCAGCTCTCTCTGATGACCTGAATCTGATCTTCT 4859
QY 4741 GAAGCAGAGCCCGAGATGCTGCTGTGGCAACATACCATCTTCAACCTGTCATTTG 4800
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QY 4801 AAAGTTCCCAATTAAGTTGACATCTGCCAGAGTCCAGTGTGCTGCTCATCTACT 4860
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QY 4861 GATACCTGCTGGTATATGCAATGAGAGAAAGTGTGACAGGAGAGACCCAAATTGACA 4920
Db 4980 GATACCTGCTGGTATATGCAATGAGAGAAAGTGTGACAGGAGAGACCCAAATTGACA 5039
QY 4921 GCTTCAACAGAAAGGGTCAACAAAAGATGTCCATGTGTGCTGCTGACCCAGAA 4980
Db 5040 GCTTCAACAGAAAGGGTCAACAAAAGATGTCCATGTGTGCTGCTGACCCAGAA 5099
QY 4981 GAATTTATGCTGCTGACAGTTTCCAGAAAACACACATCATCTTAATCTAATTT 5040
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Db 5160 ACTGAAGAGCTACTCATGTTGTTATGAAAACAGATGCTGAGTTGTGTGAACGACA 5219
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QY 5221 GTCAATGAGAGAAACCAAGTCCAAAGCGAGCAGAGAGATCCAGAGACAGAAAGATC 5280
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Db 5400 TTCAGGGGGCTAGAAATGTGTCATGAGGCCCTTACCAACATGCCACAGATCACTG 5459
QY 5341 GAATGATGTACAGCTGTGTCCTCTGTGATGAGAGAGCTTTCATCATTCACCTT 5400
Db 5460 GAATGATGTACAGCTGTGTCCTCTGTGATGAGAGAGCTTTCATCATTCACCTT 5519
QY 5401 GGCACAGGTGTCCACCCCAATTGTGGTTGTGACGCCAGATGCCGTGACAGAGACAATGGC 5460
Db 5520 GGCACAGGTGTCCACCCCAATTGTGGTTGTGACGCCAGATGCCGTGACAGAGACAATGGC 5579
QY 5461 TTCCATGCAATTTGGGCAATGTGTGAGGCACCTGTGTGACCCGAGAGTGGGTGTGGAC 5520
Db 5580 TTCCATGCAATTTGGGCAATGTGTGAGGCACCTGTGTGACCCGAGAGTGGGTGTGGAC 5639
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QY 5581 AGCCACTAC 5589
Db 5700 AGCCACTAC 5708
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